

भगवान् धन्वंतरि



God of Medicine

THE CARAKA SAMHITA

EXPOUNDED BY THE WORSHIPFUL ĀTREYA PUNARVASU,
COMPILED BY THE GREAT SAGE AGNIVEŚA
AND REDACTED BY CARAKA & DRDHABALA

VOLUME I



EDITED AND PUBLISHED

IN

SIX VOLUMES

WITH TRANSLATIONS IN HINDI, GUJARATI AND ENGLISH

BY

SHREE GULABKUNVERBA AYURVEDIC SOCIETY

JAMNAGAR

INDIA

DE LUXE EDITION

1949

RUPEES 125/-

First Impression 1949

4000 Copies

All Rights Reserved

Published by

SHREE GULABKUNVERBA AYURVEDIC SOCIETY, JAMNAGAR.

Printed in India

At The Ayurveda Mudranalaya, JAMNAGAR.

भगवताऽऽत्रेयपुनर्वसुनोपदिष्टा तच्छिष्येण महर्षिणामिवेशेन तन्निवृत्ता
चरकहृदबलाभ्यां प्रतिसंस्कृता

चरकसंहिता

साम्बय-हिंदी-गुर्जर-आङ्गलेति-भाषाप्रयानुवादालङ्कृता विविधपाठान्तरैः संयोजिता



भारतवर्षान्तर्गतसौराष्ट्रप्रदेशे श्री जामनगरे
श्री गुलाबकुंवरबा आयुर्वेदिक सोसायटी इत्याख्यया संस्थया
संपादिता प्रकाशिता च

प्रथमः खण्डः

शकाब्दः १८७१, क्रिस्ताब्दः १९४९, विक्रमाब्दः २००५

मूल्यम् १२५ रूप्यकाः

प्रथमावृत्तिः १९४९.

४००० प्रतयः

सर्वस्वाम्यसंकलिता

श्री गुलाबकुंवरबा आयुर्वेदिक सोसायटी इत्याख्यया संस्थया प्रकाशिता

SHREE GULABKUNVERBA AYURVEDIC SOCIETY, JAMNAGAR
EDITORIAL BOARD
CARAKA SAMITHA

President

Dr. Praujivan Maneekchand Mehta M. D., M. S., F. C. P. S.

Secretary

Shree Harshavantray Lalshanker Dholakia

Members

Sanskrit Section—

Vaidya Balwant Sharma Maganlal Dixit
 Shree Harilal Kalidas Shastri
 „ Prabhudas Kalidas Vyas
 Vaidya Chandrakant Prabhushanker Shukla

*

English Section—

Shree M. Krishnamurty
 „ D. Raghuttamacharya
 „ Harilal Rangildas Mankad
 „ Trambaklal Manishanker Joshi

*

Gujarati Section—

Shree Prabhudas Kalidas Vyas
 Vaidya Balwant Sharma Maganlal Dixit
 Shree Keshavlal Shyamji Kavi
 Vaidya Ishvarlal Durlabhji Mehta

*

Hindi Section—

Kaviraj Atrideva Gupta
 Vaidya Ashabhai Kashibhai Patel
 „ Vinayak Jayanand Thaker
 „ Madhukar Tryambak Gore

*

Botany Section—

Vaidya	Harprasad Bhaishanker Joshi
Prof.	Pritamlal V. Bole
Shree	Krishnaji R. Datey
Prof.	Kansiyalal Kalidas Divyeshwar

*

General Section—

Vaidya	Ramniklal Vrajlal Oza
"	Gunvantroy Ambalal Bhatt
Shree	Navalshanker Hathibhai Shastri
Dr.	Krishnalal Mohanlal Jhalu
"	Santoksingh Mohansingh
Vaidya	Vrajmohanprasad Valdasji
Shree	Prabhulal Harishanker Punjan
Vaidya	Nanjund Sharma

*

Artist—

Shree	Mausang Bechar Dudia
-------	----------------------

*

Librarian—

"	Motilal Nagindas Sheth
---	------------------------

*

Casual—

Vaidya	Vasudev M. Dwivedi
"	Damodar Sharma Gaud
"	Kashivishvanath P. Vyas
Dr.	Devshanker A. Dave
Vaidya	Bhanushanker N. Trivedi
Shree	Tribhuvan V. Hemani
"	Jaysukhlal R. Joshi
"	Ichchhashanker P. Bhatt
"	Vijayshanker N. Shastri
"	Abdul Rehman Kaji
"	Amarpalsinh Mahadevsingh

CARAKA SAMHITA

PREFACE

CONTENTS

Subject	Page	Subject	Page
Key to Transliteration	1	VI. The oath of Initiation	162
स्थानाध्यायनाभातिनिर्देशः पञ्चगादिवर्णिगणनं च	2	VII. The qualities required in the student for admission to medical studies	168
Various Editions of Caraka Samhita and its Commentaries	14	VIII. Qualities of the teacher	170
चरकसूत्रप्रस्ताविकां नामानि निर्देशश्च	25	IX. The student's life and discipline	173
चरकटीका-ग्रन्थप्रस्ताविकां नामानि निर्देशश्च	28	X. The method of theoretical and practical study	187
Foreword	1-8	XI. Institutions and universities	218
The History of Medicine in India		XII. Examination, Registration and Convocation	229
I. The History of Medicine in India	9	XIII. Completion of study	239
II. The Story of Ayurveda	22		
III. Bharadwāja	30	Medical Institutions in Ancient India Part II	
IV. Ātreya	45	I. The individual and medicine	245
V. Agniveśa	68	II. Village and medicine	254
VI. Caraka	77	III. Urban medical relief	260
VII. Dṛdhabala	96	IV. The royal physician	264
VIII. Caraka Samhitā, a redacted treatise	106	V. Military surgery	274
IX. Commentators of Caraka Samhitā	112	VI. Nursing	283
X. The Pupils of Ātreya	118	VII. Veterinary science	292
		VIII. Hospitals and equipment	298
Medical Institutions in Ancient India Part I		IX. Pharmacy	320
I. Universal education in ancient India	129	X. Fees, presents and remunerations to medical men	336
II. The purpose of the study of medicine	134	XI. The vaidyas	340
III. Selection of the system and branch of study by the medical student	138	XII. The vaidya and society	349
IV. Text books of medicine	140	XIII. State and medicine	359
V. Admission to studies	158	XIV. Quacks	364

Subject	Page	Subject	Page
Some aspects of Life in Caraka's Times		II. Reality--the soul and the world of things	466
Introduction	371	III. What is Man ?	469
I. The ceremonials observed in childhood	372	IV. The ethical note in Āyurveda	484
II. The routine of daily life	375	चरकीयदर्शनविमर्शः	490
III. Dress and Clothing	385		
IV. The use of wine	388	त्रिदोषविज्ञानम् ।	
V. The practice of smoking	392	The Science of the Triumvirate of Pathogenesis or of Constitutional Pathology	
VI. Company	395	I. The back-ground	513
VII. Marriage and procreation	397	II. The story of life	525
VIII. Treatment and the status of the patient	403	III. The triumvirate of organizations	532
IX. The use of ornaments	406	IV. The study of environment	542
X. Woman in Caraka's times	410	V. The study of constitution	544
XI. The sense of smell	418	VI. Method of nomenclature	551
XII. Routine observed during the purificatory procedures	424	VII. The nature and functions of the body triumvirate	
XIII. Regulations of society and State regarding treatment	429	(त्रिदोषस्वरूपकर्माणि)	558
XIV. Legends and Mantras	433	VIII. Imbalance condition (वैषम्य) due to increase or decrease (वृद्धि-क्षय)	572
XV. Kampilya as a centre of learning	440	IX. Vitiation process (दोषप्रकोप)	577
XVI. Various schools of thought in Caraka's times	446	X. Importance of Knowledge of constitution of the body in the study of disease condition and practical therapeutics	602
XVII. The final renunciation	448	XI. The etiological factors of disease	610
XVIII. People and their professions	451	XII. Nosology and the triumvirate	611
XIX. Astrological chart	454	XIII. Conclusion	618
		XIV. The Ideal of Health in Āyurveda	621
The Philosophical Concepts in Caraka			
I. The beginning of metaphysics and medicine	458		

KEY TO TRANSLITERATION

VOWELS			CONSONANTS			
Initial, Medial, and English Equivalents			English	Equivalents		
अ	—	a	क	k	ख	kh
आ	ā	ā	ख	kh	ग	g
इ	i	i	ग	g	घ	gh
ई	ī	ī	घ	gh	ङ	ṅ
उ	u	u	ङ	ṅ	च	ch
ऊ	ū	ū	च	ch	ज	j
ऋ	r̄	r̄	ज	j	झ	jh
ॠ	r̄	r̄	झ	jh	ञ	ñ
लृ	l̄	l̄	ञ	ñ	ट	ṭ
लृ	l̄	l̄	ट	ṭ	ठ	ṭh
ए	e or é	e or é	ठ	ṭh	ड	ḍ
ऐ	ai	ai	ड	ḍ	ढ	ḍh
ओ	o	o	ढ	ḍh	ण	ṇ
औ	au	au	ण	ṇ	त	t
• n or m	{ either true Anusvāra or the symbol of any nasal.		त	t	थ	th
:	h	Symbol called Visarga	थ	th	द	d

अध्यायनाम	नामसंज्ञा	श्लोकसंख्या	जातिरूपे
	प्रथम-		
	द्विषण- शब्दानु-	मद्य- पद्य- गद्य- पद्य-	समस्त
	नुसारतः सारतः संख्या संख्या पंक्तयः पंक्तयः पंक्तयः		
१ स्वस्थानम्			
१ दीर्घाक्षितीयः ८१*	+	२	१३८ २ २७५ २८१ अनुष्टुप्
२ अपामार्गतण्डुलीयः	+	२	३४ २ ६८ ७० ,
३ आरगवणीयः	+	२	२८ २ ११२ ११४ इन्द्रवज्रा, उपजाति
४ पद्मिरेचनवाताक्षितीयः	+	२१	७ १८८ २० २०८ अनुष्टुप्
५ मात्राक्षितीयः ७७*	+	८	१०३ २२ २०७ २२९ ,
६ सक्ताक्षितीयः	+	७	४४ २१ ८८ १०९ ,
७ नवेगान्धारणीयः	+	२	६४ २ १३४ १३६ ,
८ इन्द्रियोपक्रमणीयः	+	२९	५ ५४ १० ६४ ,
९ सुहृत्कचतुष्पादः	+	२	२६ २ ५२ ५४ ,
१० महाचतुष्पादः	+	६	१८ ४५ ३६ ८१ ,
११ निखैषणीयः		३३	३२ १७० ६४ २३४ ,
१२ वातककाकलीयः	+	१४	३ १०० ६ १०६ ,
१३ जेहाध्यायः ७२*	+	२	९८ २ १९७ १९९ अनुष्टुप्, वैजयन्ती
१४ स्वेदाध्यायः	+	८	६३ ५७ १२६ १८३ अनुष्टुप्
१५ उपकल्पनीयः	+	१७	८ १४८ १६ १६४ ,
१६ चिकित्साप्रामुतीयः	+	२	३९ २०२ ७८ ८० ,
१७ कियन्तःशिरसीयः	+	५	११७ १७ २३४ २५१ ,
१८ त्रिकोणीयः	+	८	४८ ५० ९६ १४६ ,
१९ अष्टोदरीयः	+	५	४ ९५ १२ १०७ उपजाति, अनुष्टुप्
२० महारोगाध्यायः	+	१९	६ १४२ १२ १५८ अनुष्टुप्
२१ अष्टौनिन्दसीयः	+	४	५८ २२ १२० १४२ उपजाति, अनुष्टुप्
२२ लङ्गणहृणीयः †५, १५*	+	२	४२ २ ८६ ८८ अनुष्टुप्
२३ संतर्पणीयः	+	२	३८ २ ७६ ७८ ,
२४ निजिगोमितीयः	+	२	५८ २ १२० १२२ उपजाति, अनुष्टुप्
२५ यजःपुष्पीयः	+	१५	३६ १९६ ७६ २७२ , ,

* त्रिपञ्चश्लोकमांकः । † एकपञ्चश्लोकमांकः ।

अध्याय क्रमांक	वर्णनपद्धतिः	श्लोकसंख्या	दन्तिनामध्या- श्लोकसंख्या	'भवन्तिवाच'- श्लोकसंख्या	'तत्त्वश्लोक'- संख्या
उपदेष्टः प्रश्नोत्तरः चर्चा					
१	+	१९८२	१ (६६)		१
२	+	४३०	नहि		१
३	+	४६१	,,		१
४	+	१३२४	३ (७)		७
५	+	१४९४	नहि		७
६	+	६७९	,,	१ (८)	१
७	+	८४६	३ (३३-३५)		४
८	+	११६९	नहि		५
९	+	३२०	,,		२
१०	+	+ ५४१	,,	४ (७-१०)	२
११	+	१५४२	,,	८ (५६-६३)	२
१२	+	+ ६८१	,,	१ (१५)	२
१३	+	१०८९	२ (१३-१, ९०-१)	नहि	१
१४	+	१०८८	नहि	,,	४
१५	+	१०१२	,,	४ (१८, १९, २०, २१)	३
१६	+	४८७	,,	नहि	३
१७	+	१४१८	१३ (३६-३, ७५-१)	४ (१०४, १०५, १०६, १०७)	२
१८	+	८४६	नहि	७ (९, १०, ११, १२, १३, १४, १५)	३
१९	+	६१८	,,	२ (६, ७)	२
२०	+	९८९	,,	३ (२०, २१, २२)	३
२१	+	८०५	,,	५ (५, ६, ७, ८, ९)	३
२२	+	५४७	,,	१ (४३)	१
२३	+	४९५	,,	नहि	१
२४	+	६९३	,,	,,	२
२५	+	+ १५७०	,,	५ (४१, ४२, ४३, ४४, ५०)	१

अध्यायनाम	न. प्रसंख्या	प्रथमः	द्वितीयः	तृतीयः	चतुर्थः	पञ्चमः	षष्ठः	सप्तमः	अष्टमः
विषयः	संख्या	संख्या	संख्या	संख्या	संख्या	संख्या	संख्या	संख्या	संख्या
नुसारतः	सारतः	संख्या	संख्या	संख्या	संख्या	संख्या	संख्या	संख्या	संख्या
२६ आर्येयकृष्णदीपः *२९ १०१	+	२१	९२	२२७	१९०	१९०	१९०	१९०	१९०
२७ अक्षयानिधनः *२००	+	६	३४६	२६	६९७	७२१	७२१	७२१	७२१
२८ विनिधनः	+	८	४०	५०	८०	१३९	१३९	१३९	१३९
२९ दक्षिणः	+	+	७	७	८१	१४	१४	१४	१४
३० अर्धदक्षिणः	+		२१	६८	१०९	१३८	१३८	१३८	१३८
									५२९४
२ निदानस्थानम्									
१ अक्षयनिदानम्	+		३७	७	१६०	१४	१७४	१७४	१७४
२ अक्षयनिदानम्	+		११	१८	५३	३६	८९	८९	८९
३ अक्षयनिदानम्	+		१६	२	१०८	६	११४	११४	११४
४ अक्षयनिदानम्	+		२९	२६	१०५	५२	१५७	१५७	१५७
५ अक्षयनिदानम्	+		११	५	९७	१०	१०७	१०७	१०७
६ अक्षयनिदानम्	+		१४	५	१३२	१०	१४२	१४२	१४२
७ अक्षयनिदानम्	+		१७	७	११७	१४	१३१	१३१	१३१
८ अक्षयनिदानम्	+		११	३३	५८		१२४	१२४	१२४
									१०३८
३ विमानस्थानम्									
१ अक्षयविमानम्	+		२५	३	१७६	६	१८२	१८२	१८२
२ अक्षयविमानम्	+		१२	७	८२	९६	९८	९८	९८
३ अक्षयविमानम्	+		२५	२७	२००	५४	२५४	२५४	२५४
४ अक्षयविमानम्	+		८	६	६०	१२	७२	७२	७२
५ अक्षयविमानम्	+		९	२२	६७	४४	१११	१११	१११
६ अक्षयविमानम्	+		१८	४	१४१	८	१४९	१४९	१४९
७ अक्षयविमानम्	+		२४	८	२१५	१६	२३१	२३१	२३१
८ अक्षयविमानम्	+		१४६	११	१०१०	२६	१०३६	१०३६	१०३६
									२१३३

अध्याय- क्रमांकः	वर्णनप्रकृतिः	शब्दसंख्या	द्विनिकाया- स्य संख्या	'अन्तिमपंक्तिः' संख्या	'विमल्लोक' संख्या		
	उपश्लेषः प्रश्नोत्तरः कर्त्ता						
२६	+	+	+	२७०२	नहि	८ (१५, ४६, ४७, ८३, ८६, ८७, १०५, १०६)	७
२७	+			४२७६	१ (२७७)	१ (२२६)	१६
२८	+	+		८२५	नहि	नहि	४
२९	+	+		५४२	"	४ (१०, ११, १२, १३)	१
३०	+			११३३	"	१ (३४)	४

३३००४

२ निदानस्थानम्

१	+		१०२६	१ (२७ अन्तिमपंक्तिः)	३ [३८-४०]	३
२	+		५४८	१ (६ अन्तिमपंक्तिः)	२ [१२-१४]	२
३	+	+	७७८	नहि	१ [३७]	१
४	+		९३५	"	३ [५०-५२]	३
५	+		६९६	"	४ [१२-१५]	१
६	+		९९०	१ (१३ अन्तिमपंक्तिः)	४ [५, ७, ९, ११]	१
७	+		७७९	१ (६ अन्तिमपंक्तिः)	६ [१, १९, २३]	१
८	+		७८६	नहि	नहि	३

६५९८

३ विमानस्थानम्

१	+		१०५०	नहि	१ [२६]	२
२	+		६४३	"	२ [९, १४]	१
३	+	+	१६७१	"	७ [९-११, २५, २६, ४१, ४६]	४
४	+		५१३	"	४ [९-१२]	२
५	+		६९४	"	१३ [१०-२२]	३
६	+		१०७३	"	१ [१९]	३
७	+	+	१३९१	"	६ [५-७] [२८-३०]	२
८	+		६७२२	"	नहि	११

१३५७७

अध्यायनाम

नामसंख्या

श्लोकसंख्या

जातिवृत्ते

प्रथम-

विषया- शब्दास्तु- गद्य- पद्य- गद्य- पद्य- समस्त-
नुसारतः स्वारतः संख्या संख्या पंक्तयः पंक्तयः पंक्तयः

४ शारीरस्थानम्

१ कतिधापुरुषीयम्	+	२	१५४	२	३०९	३११	अनुष्टुप्
२ अनुक्त्यगोत्रीयम्	+	२	४१	२	१८४	१८६	उपजाति
३ सुष्ठुकाग-निवक्रान्तिशारीरम्	+	१८	९	९६	१८	११४	अनुष्टुप्
४ महागर्भावक्रान्तिशारीरम्	+	४१	४	२२४	८	२३२	"
५ पुरुषविषयम्	+	१२	१४	१०४	२८	१३२	"
६ शरीरनिषयम्	+	२९	५	९७२	१०	१८२	"
७ शरीरसंख्याशारीरम्	+	१८	२	१००	४	१०४	"
८ जातिसूत्रीयम्	+	६१	२	६०६	६८६	६१८	उपजाति

१८७९

५ इन्द्रियस्थानम्

१ वर्णरसवीयम्	+	१६	१०	७३	२०	९३	अनुष्टुप्
२ पुष्टिपक्वम्	+	२	२१	२	४२	४४	"
३ परिमर्शनीयम्	+	५	२	४६	४	५०	"
४ इन्द्रियावीकम्	+	२	२५	२	५०	५२	"
५ पूर्वदृष्टीयम्	+	२	४५	२	९०	९२	"
६ कवमानिशरीरीयम्	+	२	२३	२	४६	४८	"
७ पञ्चकक्षीयम्	+	२	३०	२	६०	६२	"
८ जवाक्क्षिरसीयम्	+	२	२५	२	५२	५४	" संज्ञकम्
९ स्वररसप्रतिमितीयम्	+	२	२३	२	४४	४६	अनुष्टुप्
१० अक्षोभरक्षीयम्	+	२	१९	२	३८	४०	"
११ अनुष्टुपोक्तम्	+	२	२७	२	५४	५६	"
१२ गेयवचनवीयम्	+	२	८८	२	१७८	१८०	वैराग्य

८२१

६ चिकित्सास्थानम्

१ रसायनाध्यायः

२ रसायनाध्यायः +

६

७१

४८

१५६

२०४

अनुष्टुप्

इन्द्रियस्थानम्, शरीरस्थानम्, रसायनाध्यायः

अध्याय- क्रमांकः	वर्णनपद्धतिः	शब्दसंख्या	द्वितीयकामध्य- श्लोकसंख्या	'भवन्तिवाच' श्लोकसंख्या	'तत्रश्लोक' संख्या
---------------------	--------------	------------	-------------------------------	-------------------------	--------------------

उपदेशः प्रश्नोत्तरः चर्चा

४ आसीत्स्थानम्

१	+	२२१४	नहि	नहि	१
२	+	९९८	"	"	१
३		१५९१	"	६ [१९-२४]	२
४	+	१४४७	"	नहि	४
५		८७०	"	३ [१३-१५]	२
६	+	१३२९	"	१ [१९]	४
७	+	७७९	"	नहि	२
८	+	३३१०	४ (४२ उपान्त्य, ५३ अन्त, ५४ अन्त, ५७ अन्तपर्यन्तः)	"	२
		१२४००			

५ इन्द्रियस्थानम्

१	+	६२०	नहि	९ [१७-२५]	१
२	+	२९२	"	नहि	१
३	+	३४३	"	"	१
४	+	३४७	"	"	१
५	+	५६६	"	"	१
६	+	३२३	"	"	१
७	+	४४७	"	"	१
८	+	३४८	"	"	१
९	+	३०९	"	"	२
१०	+	२६३	"	"	१
११	+	३६७	"	"	१
१२	+	११२६	"	१२ [४०-६१]	२
		५३६८			

६ निमित्तस्थानम्

३

(१)

१२५४

११५१

१५२३७४-२०

अध्यायनाम

नामसंज्ञा

श्लोकसंख्या

प्रातिपदिका

वेद्य- प्रपञ्च- गद्य- पद्य- गद्य- पद्य- स्वयंप्रकाश-
 लुकारतः कव्यानु- संख्य- संख्या- गणकयः "कयः पंक्तयः
 सारतः

निमित्तस्थानम् (Cont.)

(२) प्राणकामीयः स्वयंप्रकाशः	+	१४	९	११३	२०	१३१	अनुपद	प्रातिपदिका
(३) अरुचिनीयः स्वयंप्रकाशः	+	३	६३	१९	१३६	१११	अनुपद	प्रातिपदिका
(४) काशुर्दमसुस्थानीयः	+							
स्वयंप्रकाशः		७	३७	५७	११६	१७३	१०	१०
२ वाजीकरणपद्यः								
(१) वियोगशरपूलीयः पद्यः	+	२	२१	२	१०६	१०१	१०	१०
(२) आभिरुचिनीयः पद्यः	+	२	३०	२	६४	६५	१०	१०
(३) प्राणवर्णशरीयः पद्यः	+	२	२९	२	६२	६४	१०	१०
(४) सुभाजालवलादिकः पद्यः	+	२	५१	२	१००	१०४	१०	
३ अरुचिनीयः	+	५	३४१	५७	६८३	७११	१०	
४ अरुचिनीयः	+	२	१०९	२	२९२	२९४	१०	
५ अरुचिनीयः	+	२	१८६	२	४०६	४०८	१०	अनुपद, प्रातिपदिका, स्वयंप्रकाश
६ अरुचिनीयः	+	२	५९	२	२३०	२३२	१०	अनुपद, प्रातिपदिका
७ अरुचिनीयः	+	३	१७७	६	३६६	३७२	१०	अनुपद, प्रातिपदिका
८ राजगद्गदचिकित्सितम्	+	२	१८९	२	३७८	३८०	१०	
९ अरुचिनीयः	+	७	९१	५३	२१३	२६१	१०	अनुपद
१० अरुचिनीयः	+	२	६६	२	१३०	१३४	१०	
११ अरुचिनीयः	+	२	९५	२	११०	११२	अनुपद	
१२ अरुचिनीयः	+	२	१०१	२	४०९	४०४	अनुपद, प्रातिपदिका, स्वयंप्रकाश	
१३ अरुचिनीयः	+	१३	१८३	६५	३६७	४३२	अनुपद	
१४ अरुचिनीयः	+	११	२४४	९८	४८८	५८६	अनुपद	
१५ अरुचिनीयः	+	२	२४७	३	४९६	४९८	अनुपद	
१६ पाण्डुरोगचिकित्सितम्	+	२	१३७	२	२७४	२७६	"	
१७ द्विधाभासचिकित्सितम्	+	२	१४९	२	२९८	३००	"	
१८ कासचिकित्सितम्	+	२	१८९	२	३७९	३८१	"	
१९ अरुचिनीयः	+	११	११२	९८	२२६	३२४		

अध्याय- क्रमांकः	वर्णनप्रकृतिः	शब्दसंख्या	दन्तिकाशब्द- श्लोकसंख्या	'भवन्तिवाच' श्लोकसंख्या	'तत्रश्लोक' संख्या
	उपदेक्षः प्रश्नोत्तरः चर्चा				
(२)	+	८४३	नहि	५ [५, ६, १७-१९]	१
(३)	+	९३४	"	३ [४-६]	१
(४)	+	१०९०	"	३ [८-१०]	२
२					
(१)	+	७१४	१ (६)	३ [५०-५१]	२
(२)	+	३८७	नहि	२ [३०, ३१]	१
(३)	+	३७५	"	नहि	१
(४)	+	६६०	"	"	२
३	+	४१९६	"	११ [२६०, २६६, २६८-२७१]	१
४	+	१४२४	"	नहि	२
५	+	२३१२	"	"	६
६	+	६८३	"	"	३
७	+	२३००	"	"	३
८	+	२१८७	"	"	२
९	+	१६१३	१ [२० अष्टश्लोकिः]	"	१
१०	+	८५३	नहि	"	२
११	+	११६४	"	नहि	२
१२	+	१९०८	"	"	१
१३	+	२६५४	"	५ [५०-५४]	२
१४	+	३१४०	"	१० [१२, १३, १५, १६, १८, १९, २४३-२४६]	७
१५	+	३१६१	"	८ [२३५-२४३]	६
१६	+	१६३७	"	नहि	२
१७	+	१८६५	"	"	१
१८	+	२३६४	३ [१५२]	"	१
१९	+	२२५६	नहि	"	१

अध्यायनाम	नामसंज्ञा	श्लोकसंख्या	जानिषते				
चिकित्सास्थानम् (cont.)	प्रथम- विषया शब्दानु- नुसारतः सारतः संख्या	द्वितीय- शब्दानु- संख्या	तृतीय- शब्दानु- संख्या	चतुर्थ- शब्दानु- संख्या	पञ्च- शब्दानु- संख्या	समस्त- पञ्च- संख्या	जानिषते
२० छर्दिचिकित्सितम्	+	२	४६	२	१८२	१८०	उपजाति, हृन्मयज्जा
२१ विसर्पचिकित्सितम्	+	१२	१३४	१६	२६९	३६१	अनुष्टुप्
२२ मृणारोगचिकित्सितम्	+	२	६१	२	११२	१११	कार्वा, उग्रोति
२३ शिबचिकित्सितम्	+	२	२५२	२	५१४	५१६	अनुष्टुप्, कार्वा, गीति, संकल्प
२४ मदात्मयचिकित्सितम्	+	२	२०९	२	४१८	४२०	अनुष्टुप्
२५ द्विघणीयचिकित्सितम्	+	२	११९	२	२२९	२३१	"
२६ त्रिमर्मीयचिकित्सितम्	+	२	२९२	२	५३५	५३७	अनुष्टुप्, उपेन्द्र- वज्रा, उपजाति हृन्मयज्जा
२७ ऊरुस्तम्बचिकित्सितम्	+	२	६०	२	१२०	१२२	अनुष्टुप्
२८ वातव्याधिचिकित्सितम्	+	२	२४७	२	४९९	५०१	"
२९ वातकोणितचिकित्सितम्	+	२	१६३	२	३२६	३२८	उपजाति अनुष्टुप्
३० योनिव्याधचिकित्सितम्	+	२	३३८	२	६७८	६८०	"

११०७४

११०७४

७ कल्पस्थानम्

१ मदनकल्पः	+	२६	४	१५८	१२	१७०	अनुष्टुप्
२ जीमूतकल्पः	+	२	१६	२	२६	२८	"
३ हृन्मयकल्पः	+	२	२१	२	४३	४५	"
४ धामागीकल्पः	+	२	१८	२	३७	३९	"
५ वत्सकल्पः	+	२	१०	२	२०	२२	"
६ कुम्भवेधनकल्पः	+	२	१२	२	२४	२६	"
७ हर्वाभाषिकल्पः	+	२	७८	२	१६०	१६२	"
८ अनुष्टुपकल्पः	+	२	१६	२	३२	३४	"
९ तिलकल्पः	+	२	१६	२	३२	३४	"
१० अनुष्टुपकल्पः	+	२	२०	२	४०	४२	"

अध्याय- क्रमांकः	वर्णनप्रकृतिः	शब्दसंख्या	वृत्तिकामध्य- श्लोकसंख्या	'भवन्ति चान' श्लोकसंख्या	'तथैवश्लोक' संख्या
---------------------	---------------	------------	------------------------------	-----------------------------	-----------------------

उपदेशः प्रश्नोत्तरः चर्चा

२०	+	८७९	नहि	नहि	१
२१	+	२१८८	३ [८२]	"	३
२२	-	८७९	नहि	"	१
२३	+	३२०३	१ [३, १६१; ३, २०२]	" [२१०-२५३]	१
२४	+	२५९८	नहि	नहि	५
२५	+	१५८५	"	"	२
२६	+	४२६०	७३ [२७-३१; ४०, ४१, ३, २००]	३ [२९१-२९३]	१
२७	+	७७४	१ [३, ४४; ३, ५५]	नहि	१
२८	+	३११९	२ [३, ४५, ३, १५७, ३, १६४, ३, १९९]	"	२
२९	+	१९८७	नहि	"	३
३०	+	४०६९	५ [३६२, ३, ६४, १६८, १(२१९; २२०)] [८३३ १२७, १२८-१३२; ३, २५५, ३३०५, ३०६]	६३ [२८८-२९०]	३
		६७५३३			

॥ कव्यपरिभाषा ॥

१	+	११९७	नहि	नहि	३
२	+	१८१	"	"	२
३	+	३०३	"	"	३
४	+	२५३	"	"	४
५	+	१४२	"	"	१
६	+	१८०	"	"	२
७	+	१०८३	"	३ [७५, ७६]	४
८	+	२२९	"	नहि	२
९	+	२४६	"	"	२
१०	+	३३६	"	"	२

अवधारणायाम्	नामसंख्या	प्रथमः	द्वितीयः	तृतीयः	चतुर्थः	पञ्चमः	षष्ठः	सप्तमः	अष्टमः	नवमः	दशमः	जातिवृत्ते
७ कल्पस्थानम् (cont.)	दिनाङ्कः	शब्दाङ्कः	गद्य	पद्य	पद्य	पद्य	पद्य	पद्य	पद्य	पद्य	पद्य	
	नुसारतः	सारतः	संख्या	संख्या	संख्या	संख्या	संख्या	संख्या	संख्या	संख्या	संख्या	
११ सप्तम्यापदिकी पद्यः	+	२	१७	२	३४	३४	३४	३४	३४	३४	३४	अनुष्टुप
१२ दन्तीवृत्ती पद्यः	+	२	१०१	२	२११	२११	२११	२११	२११	२११	२११	इन्द्रवज्रा
												८१४
८ सिद्धिस्थानम्												
१ कल्पस्थानसिद्धिः	+	२	५८३	२	१३४	१३४	१३४	१३४	१३४	१३४	१३४	मार्गः, इन्द्रवज्रा
२ पञ्चम्यापदिकी सिद्धिः	+	१८	१०	१५१	२०	१५१	१५१	१५१	१५१	१५१	१५१	अनुष्टुप
३ अष्टम्यापदिकी सिद्धिः	+	२	६९	२	१३४	१३४	१३४	१३४	१३४	१३४	१३४	उपेन्द्रवज्रा, इन्द्रवज्रा, अष्टम्यापदिकी
४ स्नेहस्थानसिद्धिः	+	२	५४	२	१०८	१०८	१०८	१०८	१०८	१०८	१०८	अनुष्टुप
५ मेघस्थानसिद्धिः	+	२	१७	२	३४	३४	३४	३४	३४	३४	३४	"
६ वज्रस्थानसिद्धिः	+	२	९३	२	१८५	१८५	१८५	१८५	१८५	१८५	१८५	"
७ अक्षिस्थानसिद्धिः	+	२	६४	२	१२०	१२०	१२०	१२०	१२०	१२०	१२०	"
८ आद्यस्थानसिद्धिः	+	२	४४	२	९०	९०	९०	९०	९०	९०	९०	" मार्गः
९ अक्षिस्थानसिद्धिः	+	८	११२	१४	२२१	२२१	२२१	२२१	२२१	२२१	२२१	"
१० अक्षिस्थानसिद्धिः	+	२	४६	२	९५	९५	९५	९५	९५	९५	९५	" मार्गः
११ कल्पस्थानसिद्धिः	+	२	३५	२	१३८	१३८	१३८	१३८	१३८	१३८	१३८	मार्गः, मार्गः, अनुष्टुप
१२ उत्तरस्थानसिद्धिः	+	८	४७	२०१	९८	२०२	२०२	२०२	२०२	२०२	२०२	मार्गः, मार्गः, मार्गः
												१५२१

चरकसंहितासंस्कृतः

सुनस्थानम्	५२९४
निदानस्थानम्	१०३८
विश्वस्थानम्	२१३३
आर्यस्थानम्	१८७९
इन्द्रिस्थानम्	८२१
चिकित्सास्थानम्	११०७४
कल्पस्थानम्	८५४
सिद्धिस्थानम्	१९२१

समस्तपङ्क्तयः २५०१४

चरकलिखितानि

अनुष्टुप
इन्द्रवज्रा
उपेन्द्रवज्रा
उपेन्द्रवज्रा
मार्गः
इन्द्रवज्रा
मार्गः
पुष्पिस्ताम्
मार्गः (प्रभावती)
अनुष्टुपस्थानसिद्धिः
विश्वस्थानसिद्धिः
जाति { मार्गः
{ गीति
{ अक्षिस्थानसिद्धिः

अध्याय-
क्रमाङ्कः

वर्गेनपद्धतेः

शब्दसंख्या

द्वितीयमध्य-
श्लोकसंख्या

अवन्तिवात्र'
श्लोकसंख्या

'तत्रश्लोक'
संख्या

उपदेशः प्रश्नोत्तरम् चर्चा

७ करस्थानम् (contd.)

११	+	२४३	नहि	नहि	३
१२	+	१२०७ ५ [तृतीयश्लोकान्तरम् ३६-३०]		४ [४३-४६]	७

५७२०

८ सिद्धिस्थानम्

१	+	१०५७	नहि	नहि	१
२	+	११०१ एकः शब्दः [१० चतुर्थपंक्तिः दुर्गा]		"	५
३	+	११५१	नहि	"	१
४	+	६९४	"	"	५
५	+	२४४	"	"	१
६	+	११८७	"	"	२
७	+	८६४	"	"	१
८	+	५१६	"	३ [४३-४५]	१
९	+	१६९६ १३ [३१३, ३८४, ३०८]	३ [९, १०, ११]		२
१०	+	६०० १ [३२७, ३३५]	नहि		३
११	+	५७६	नहि	"	१
१२	+	१९२८ [५०, एकः शब्दः वर्ष १३४१]	४ [२०-२३]		
		दशमपंक्ति ४ (५२-५५)			
		११६९४			

चरकतन्त्रे

	स्थानानि	अध्यायाः	शब्दाः
१	सूत्रस्थानम्	३०	३३००४
२	निदानस्थानम्	८	६५९८
३	विमानस्थानम्	८	१३७५७
४	शारीरस्थानम्	८	१२४००
५	इन्द्रियस्थानम्	१२	५३६८
६	चिकित्सास्थानम्	३०	६७५२३
७	कल्पस्थानम्	१२	५७२०
८	सिद्धिस्थानम्	१२	११६९४
		१२०	१५६०६४

The task of consulting all available editions and manuscripts was an uphill one and it is a matter of great satisfaction to us that we have been able to consult as many editions and manuscripts of Caraka Samhitā as were possible with the limited time at our

क्रमः पुस्तकम्	टीकाकारः	टीकाया नाम	भाषा	परिशोधकः
१ चरकसंहिताः	चक्रपाणिदत्त	आयुर्वेददीपिका	संस्कृत	वासन शास्त्री वैद्यभूषण
„ द्वितीया आवृत्तिः			„	
„ तृतीया आवृत्तिः			„	
२ चरकसंहिता (आद्यः खण्डः)	चक्रपाणिदत्त गंगाधर कविराज	आयुर्वेददीपिका जल्पकल्पतरु	„	नरेन्द्रनाथ सेनगुप्त कविराज तथा च श्री बलार्हचंद्र सेनगुप्त कविराज
„ „ (द्वितीयः खण्डः)	„ „	„ „	„	
„ „ (तृतीयः खण्डः)	„ „	„ „	„	
३ „ „ प्रथमो भागः	कविराज गंगाधर कविराज	जल्पकल्पतरु	„	वंगलिप्याम्
„ „ द्वितीयो भागः	„	„	„	„
४ „ „ प्रथमो भागः	पं. तारादत्त पंत	भागीरथी	संस्कृत	पं. तारादत्त पंत
„ „ द्वितीयो भागः	„ „	„	„	„
५ „ „ प्रथमो भागः	योगीन्द्रनाथ सेन	चक्रकोपस्कार	„	
„ „ द्वितीयो भागः	„ „	„	„	
„ „ तृतीयभागस्य प्रथमः खण्डः	„ „	„	„	
६ „ „ प्रथमो भागः	१ चक्रपाणिदत्त २ नेउज्जट	१ आयुर्वेददीपिका २ निरन्तरपद	„	हरिदत्त शास्त्री आयुर्वेदाचार्य
„ „ द्वितीयो भागः	„	„	„	„
७ „ „ पूर्वार्द्धम्	चक्रपाणिदत्त	आयुर्वेददीपिका	„	नरेन्द्रनाथ शास्त्री मिहिरचंद्र रत्नात्मज
„ „ उत्तरार्द्धम्	„ „	„	„	„
८ „ „ सूत्रस्थानम् (प्रथमः खण्डः)	„ „	„	„	कविराज अविनाशचंद्र
„ „ सूत्रस्थानम् (चतुर्थः खण्डः)	„ „	„	„	„

disposal. We have consulted the editions given in the table below. Some were available in parts only—incomplete yet valuable. They have helped us in determining the correct reading from among the variants.

क्रमांकः	मुद्रणालयम्	प्रसिद्धकर्ता	आवृत्तिः	प्रकाशनवर्षम्
१	निर्णयसागर	पाण्डुरंग जावजी शुभई	प्रथमा	ई. प. १९२२
			द्वितीया	ई. प. १९३५
			तृतीया	ई. स. १९४१
२	धन्वन्तरि स्टील कशीन यन्त्र	परिशोधक, कलकत्ता		श. स. १९४९
				,, १९५०
				,, १९५५
३	प्रसादभोजन यन्त्र, बहेरावपुर, सैदावाद	श्री धन्वन्तराय पतिराज	प्रथमा	तद्वि लिखितम्
			,,	सं. १९५१
४	बिन्दाविलास प्रेस, बनारस	जयकृष्णदास हरिदास गुप्ता बनारस	,,	शं. १९५१
	,,	,,	,,	ई. १९३७
	,,	,,	,,	शं. १९५५
	,,	,,	,,	ई. १९३८
५	विद्योदय प्रेस, कलकत्ता	जे. एन. सेन, कलकत्ता	,,	ई. सं. १९२०
	,,	,,	,,	,, १९२२
	,,	,,	,,	,, १९३०
६	संस्कृत मुद्रणालय, मुंबई	भोतीलाल बनारसीदास	द्वितीया	,, १९४०
	,,	,,	,,	,, १९४१
७	,,	,,	प्रथमा	,, १९२९
	,,	,,	,,	,, ,,
८	ज्योतिप्रकाश चन्द्रालय कलकत्ता	अविद्याना यन्त्र	,,	बंग. १९१५
	,,	,,	,,	ई. स. १९८८
	,,	,,	,,	बंग. १९९७

क्रमाङ्कः	पुस्तकम्	टीकाकारः	टीकायाः नाम	भाषा	परिशोधकः
	चरकसंहिता सूत्रस्थानम् (प्रथमः खण्डः)	चक्रपाण्डित	प्राधुन्यरीपिका	स्कृत	विभाज अदिनाशचन्द्र
	(पष्ठः खण्डः)	"	"	"	"
	" सूत्रस्थानम्	"	"	"	"
९	" सूत्रस्थानम् सप्तमः खण्डः				
"	" शारीरस्थानम् प्रथमोऽध्यायः	ज्योतिषचंद्र सरस्वती	चरकप्रदीपिका	"	म. म. श्री योगीन्द्रनाथ म. म. श्री विधुशेखर भट्टाचार्य
१०	" प्रथमः खण्डः	"	"	"	"
११	" सूत्रमात्रम्			"	श्री यादवजी त्रिकमजी आचार्य
१२	" "			"	
१३	" सूत्रस्थानम् पूर्वार्धम्			मराठी भाषान्तरम्	वैद्य पंचानन कृष्णशास्त्री कवडे
"	" " उत्तरार्धम् १			"	"
"	" " " २			"	"
"	" निदानस्थानम्			"	"
"	" विमानस्थानम्			"	"
"	" शारीरस्थानम्			"	"
"	" इन्द्रियस्थानम्			"	"
"	" चिकित्सास्थानम् १-५.			मराठी भाषान्तरम्	वैद्यपंचानन कृष्ण शास्त्री कवडे
"	" ५-११			"	"
"	" १२-१९			"	"
"	" २०-२६			"	"
"	" २७-३०			"	"
"	" कल्पस्थानम्			"	"
"	" सिद्धिस्थानम्			"	"
१४	" प्रथमो भागः	पं. रामासाह वैद्योपाध्याय	प्रसादनी	हिन्दी	आयुर्वेदाचार्य शिव- शर्मा
"	" द्वितीयो भागः	"	"	"	"
१५	" प्रथमो भागः	पं. कालीचरण शर्मा तथा च		" टीका	"
१६	" पूर्वार्धम्	पं. क्षमापति शर्मा श्री कृष्णलाल		" अनुवादः	

क्रमः	मुद्रणालयम्	प्रसिद्धकर्ता	आवृत्तिः	प्रकाशनवर्षम्
	ज्योतिषप्रकाश रन्ध्र १३ कलकत्ता,	अविनाशचन्द्र	प्रथमा	१२९८
	"	"	"	नहि लिखितम्
९	इन्डियन प्रेस लि. बनारस	पेंडशीकुमार सरस्वती	"	शकाब्द १८५९
१०	दम्बई संस्कृत प्रेस, लो	मोतीलाल बनारसीदास लाहौर	"	ई. स. १९४६
११	निर्णयसागर प्रेस, मुंबई	पण्डुरंग जावजी	तृतीया	ई. स. १९३३
१२	लक्ष्मी बेंकटे र	गंगाविष्णु श्री कृष्णदास, मुंबई	प्रथमा	सं. १९८९ शकाब्द १८५४
१३	हनुमान प्रेस, पूना	यज्ञेश्वर गोपाल दीक्षित बुकसेलर, पूना.		ई. स. १९३६
"	"	"	तृतीया	" "
"	"	"	"	" "
"	"	"	"	"
"	"	"	"	"
"	"	"	"	"
लो प्रिन्टिंग प्रेस, पूना	"	"	"	"
"	"	"	तृतीया	"
लो प्रिन्टिंग प्रेस, पूना	यज्ञेश्वर गोपाल दीक्षित बुकसेलर पूना		तृतीया	१९३६
"	"	"	"	"
"	"	"	"	"
"	"	"	"	"
"	"	"	"	"
"	"	"	"	"
"	"	"	"	"
हनुमान प्रेस, पूना	"	"	"	"
१४	लक्ष्मी बेंकटेश्वर स्टीम ? मुंबई	गंगाविष्णु श्रीकृष्णदास	प्रथमा	सं १९८८
"	"	"	"	" "
१५	नवलकिशोर यन्त्रालय, लक्ष्मीपुर लखनौ		प्रथमा	ई. स. १९००
१६	मुंबईमित्र प्रेस, मुंबई	दयामलाल श्री कृष्णदास	"	" १९०३

क्रमांकः	ग्रन्थकम्	टीकाकारः	टीकायाः नाम	भाषा	परिशोधकः
	चरकसंहिता	उत्तरार्धम्		संस्कृत	
१७	" "	मूलभाषम्		गुजराती भाषान्तरम्	
१८	" "	प्रथमो भागः	जेटालाल देवशंकर दवे	समूलम्	
	" "	द्वितीयो भागः	"	अमूलं गुजराती भाषान्तरम्	
१९	" "			मलयालम् मूलम्	
				तस्यामेव लिप्याम्	
२०	" "			"	
२१	" "			"	
२२	" "			"	
२३	" "	प्रथमो भागः	पं. अविनाश चंद्र कविरत्न	अंग्रेजी भाषान्तरम्	
	" "	द्वितीयो भागः	"	"	
	" "	तृतीयो भागः	"	"	
२४	" "	प्रथमः खण्डः	अश्विदेवजी गुप्त	हिन्दी भाषान्तरम्	
	" "			समूलम्	
	" "	द्वितीयः खण्डः	"	"	
	" "	तृतीयः खण्डः	"	"	
२५	" "		मिहिरचंद्र	"	
२६	" "	प्रथमो भागः		तेलुगु भाषान्तरेण सह	
	" "	द्वितीयो भागः		"	
	" "	तृतीयो भागः		"	
	" "			"	
१७	" "	प्रथमो भागः	जगदेव विद्यालंकार	हिन्दी भाषान्तरम्	
	" "		चन्द्रादेदीपिका	समूलम्	
	" "	मध्यो भागः	" "	" "	
	" "	उत्तरो भागः	" "	" "	
२८	" "		यशोदानंदन सरकार	बंगाली अनुवादः	
२९	" "		कविभूषण सतीशचंद्र	" "	
३०	" "			उर्दू अनुवादः	
३१	" "			हिन्दी भाषान्तरम्	

क्रमांकः	मुद्रणालयम्	प्रति	रु. प्रति	प्रकाशकम्
१७	शीर्ष्ययन्त्राद्यावधिगतविशेषेतिवृत्तम्			
१८	सत्यनारायणप्रेस अमदावाद	जेठासा ३ देवशंकर दवे	प्रथमा	ई. स. १९१६
	भांग्योदय प्रिंटिंग प्रेस अमदावाद	"	"	" १९३१
१९				
२०				
२१	भारत विलास प्रेस, त्रिचुर			
२२				
२३		परेशनाथ कवि भूषण	प्रथमा	" १९१२
२४	वि फाइन आर्ट प्रेस अजमेर	आर्य साहित्य मंडल अजमेर	" " "	सं. १९९२ " १९९३ " १९९४
२५	वैकटेश्वर मुद्रणालय, मुंबई	खेमराज श्री कुलगदास	"	ई. स. १९९८
२६	बाणीविलास प्रेस, मद्रास	वी. आर. एस. एफ. सन्स	"	" १९३५ " १९३७ " १९३९ " १९४१
२७	मुंबई संस्कृत प्रेस	मोतीनाल बनारसीदास लाहोर	प्रथमा	" १९९१
	"	"	"	१९९२
	"	"	"	१९९३
२८	बंगवासी इलेक्ट्रीक मशीन	श्री तदवरलाक चक्रवर्ती	द्वितीया	१९३०
२९				ई. स. " १९०३
३०	आर्य स्टडीमप्रेस, लाहोर	आधुनिक फार्मास्युटीकल कं. लि. लाहोर.		" १९१३
३१	बम्बई.	बी.जे.जी.		" १९००

Our Library
No.

टीका नाम

४७ शिवदाससेन M/S. चरकतटीयिका शिवदाससेन

R ५३१२ तिरुपति M/S. पांडिका
पंजाब यु. M/S.

स्वामिकुमार
जगदीश शास्त्रिणा चिकित्सासूत्रे १ लाहोर १८०५ खया
प्रतिलिपिलिखितम्

बालाजीपंडितेन कल्पद्रुमि शाने ब्रह्मपुर १७८६ ,,
लिखितम्

सिद्धिस्थः ५

N. ३८४२

निदानसूत्रम्
कल्पद्रुमः ३

N. ३८४६

विमानसूत्रम्

N. ३८४७

,, १७८५

N. ४१९५

सूत्रस्थानः १८०५-१२-
१३-१४-२७

N. ३८५०

,, १७८०

आयुर्वेदः पिका चक्रदत्त

चिकित्सा १-२

विमानस्थानः १

सूत्र १-२५

३१

सूत्र. १-५

विमान ४

१८२५ ,,

चिकित्सा. सूत्र ७

वाजीकरणम्.

१८२४ ,,

सूत्र.

१८२४ ,,

सिद्धि.

सूत्र. ५

Traditional commentators on Caraka Samhita are many but only a few of them are available to us. We enumerate below the commentators referred to as such in all the existing works.

क्र.	Text	Commentator	Commentary named	Year (century)
१	चरकसंहिता	चक्रपाणि	आयुर्वेददीपिका अथवा चरकतत्पर्य	11 th A. D.
२	"	शिवदास	तत्त्वचन्द्रिका	15 th A. D.
३	"	श्री कृष्णमिपक्	श्री कृष्णनाथ्यम्	
४	"	गंगाधर	जल्पकल्पतरु	
५	"	योगीन्द्रनाथ	चरकोपस्कार	
६	"	भट्टार हरिचन्द्र	चरकन्यास	5 th A. D.
७	"	जेज्जट	निरुत्तरपद	6 th A. D.
८	"	हरिश्चन्द्र		
९	"	अंगिरि		
१०	"	सैधव		
११	"	ईश्वरसेन		
१२	"	श्रीकण्ठ		
१३	"	पतञ्जलि		
१४	"	वाष्पचन्द्र		
१५	"	हेमचन्द्र		
१६	"	भोजहस्ति		
१७	"	व चस्पति		
१८	"	स्वामिकुमार	पंजी छ	
१९	"	ईशानदेव		
२०	"	बकुल		
२१	"	भीमदत्त		
२२	"	जिनदास		
२३	"	गुणाकर		
२४	"	नरदत्त		
२५	"	चन्द्रिकाकार		
२६	"	भासदत्त		
२७	"	स्वामिदास		
२८	"	भाषाढवर्मा		
२९	"	ब्रह्मदेव		

क्र.	Text	Commentator	Commentary named	Year (century)
३०	चरकसंहिता	क्षीरस्वामिदत्त		
३१	"	परिहार दार्तिककार		
३२	"	हिमदत्त		
३३	"	वैष्णवाः		
३४	"	पैतामहाः		
३५	"	चेच्छदेव		
३६	"	गदाधर		
३७	"	कार्तिक		
३८	"	सुधीर		
३९	"	नृसिंह	चरकतत्त्वप्रकाशकौस्तुभ	
४०	"	इन्दुकर		
४१	"	हेमाद्रि		
४२	"	अरुणदत्त		
४३	"	उल्ङ्ग		

The table below gives a list of manuscripts together with their listed numbers and the names of the libraries.

क्र.	मूलम्	टीका	टीकाकारः	स्थानम्	संग्राहकः	विशिष्टत्वम्
१	सूत्र-निदान-विमान.	आयुर्वेददीपिका	चक्रपाणि	नाथद्वारा	वैद्य जयशंकर हरजीवन नाथद्वारावास्तव्यः	
२	शारीर	"	"	लाहोर	द. ए. वे. महाविद्यालय- स्थित क. श्री सुरेन्द्रमोहन श्री लालचंद पुस्तकालय द्वाराप्राप्तम्	प्रायः शुद्धम् ३५ पत्रात्मकम् अन्तराखण्डितपत्रम् अशुद्धिबहुलम्
३	चिकित्सा अ. ७-१९	"	"	"	"	मूलम् काश्मीरपाठ- नुयायि प्रायः शुद्धम् अशुद्धिबहुलम्
४	संपूर्णम्	"	"	"	"	अशुद्धिबहुलम्
५	चि. वि. १-२३	"	"	टिबिजन-जर्मनी	युनिवर्सिटि-पुस्तकालयम्	अशुद्धिबहुलम्
६	" (अ. १-४; १८-३०) कल्प- विधि	"	"	बीकानेर	संजयप्रसाद पुस्तकालयम्	श्री केवलरामस्वामी- महोदयलेखयित्वा प्रेषितम्

क्र. नूतलम्	टीका	टीकाकारः	स्थानम्	संग्राहकः	विशिष्टवृत्तिः
७ सूत्रकल्प	—	—	अहनदाबाद	वैद्य रणछोडलाल मोतीलाल दोषा	
८ चिकित्सा. कल्प-सिद्धि	—	—	वाराणसी	पं. रामशंकर शर्मा	
९ सूत्र. अ. १-२७ तत्त्वप्रदीपिका	श्री शिखण्डाससेन	मुंबई		रोयल एशियाटिक सोसायटी	
१० सूत्र. अ. १-२७	—	—	—	श्री यादवजी महोदय	प्रतिलिपीकृतम्
११ चिकित्सा. कल्प-सिद्धि निरन्तरपाद	जेजुट	मद्रास		राजकीय पुस्तकालय	ताडपत्रलिखित- प्रतिलिपीकृतम्
१२ सूत्र. अ. १-५	पंजीका	स्वामीकुमार	—	—	प्रतिलिपीकृतम्
१३ संपूर्णम्	—	—	लाहोर	श्री लालचंद पुस्तकालय	काश्मीरपाठानुयायि
१४			मद्रास	G. O. M. L. vol. XXXIII No. 13090	
१५			—	I. O. 2637	
१६ चरकसूत्रम्			—	B. 4. 222	
१७			—	C. P. B. cat. 1640-43	
१८			—	C. S. C. 17-22-105	
१९			—	A. S. B.	
मूलम्			स्थानम्	संग्राहकः	विशिष्टवृत्तिः
२० A			Alwar	Palace Library	No. 1624
२१ D ¹			Poona	Deccan College	No. 368 fl. 30 b, 1-4 fl. 319-1-3
२२ D ²			—	—	No. 925 fl. 107 b 1-8 fl. 1084-1-4
२३ 10 ¹			London	India Office	No. 338 fl. 225 b 1-2 fl. 226 a 1-1
२४ 10 ²			—	—	No. 851, fl. 71 b 11, 2-13
T ¹			Tibingen (Germany)	Tibingen University	No. 458, fl. 324 b 1-5 fl. 325 A. 1-6
२५ T ²			—	—	No. 459 Vol. II fl. 29 b 1-3 fl. 30 a, 1-3
S ¹			—	Dr. P. Cordier	Śārada MS
२६ S ²			Kashmir	Jammu Library	No. 3266 fl. 118

क्र.	मूलम्	स्थानम्	संयोजकः	विशेषत्वः
२९		Calcutta	श्री योगेन्द्रनाथ सेन copied by his father	1796 S. S. Bengali i. e. with notes 1874 A. D.
३०		Gujarat	गंगाधरभास्ती	1711 V. S. 1771 A. D. Jain Nagari
३१		Jaipur	पंडित प्रभुलाल	1643 V. S. 1700 A. D. Devanagari fairly correct
३२	सूत्र. विज्ञान.	"	लक्ष्मीधर आचार्य	Very old. Correct
३३	संपूर्णम्		Govt. of India	Very old in appearance. No. 4474. Devanagari. Not very correct
३४	"		"	New in appearance No. 4391 Bengali. Fairly correct
३५	"		Benares College	Yellow paper No. 41 Bengali. Fairly correct
३६	सूत्र.		"	Very old in appearance. Palm Leaf. Bengali. Correct
३७			Copied by Gangadhar Kaviraj	1761 S. S. Bengali 1839 A.D. Very correct and Valuable
३८		Nadia	Copied by Brijgopal Raj	Bengali. Very correct
३९		London	India Office (Colebrooke collection)	No 880. Devanagari

क्र.	मूलम्	स्थानम्	संग्राहकः	विशिष्टसूचिः
	विमान. शारीर. इन्द्रिय.			
४०	उत्तरविक्रित्या अन्ततः	Khatmandu Nepal	Nepal Durbar Library	Original in Deva- nagari 1183 A. D. from Newari
४१	विमान.	Calcutta	Govt. Sanskrit College	No 23 Bengali
४२	विमान.	"	"	No 27 Bengali
४३	शारीर (Bengali)	"	"	No 20. Sources
४४	विक्रित्या (Devanagari)	"	"	seem to be different

Besides the translations in Indian languages like Gujarati, Marathi, Hindi, Urdu, Bengali, Telugu, Malayalam etc., we find references to enable us to conclude that Caraka Samhitā was translated into Arabic, Tibetan, Pehlvi and Persian. Alberuni refers to an Arabic translation by Ali-ibn-zain from Tabaristan. This was prepared for the use of the princes of the House of Barmecides. One Abdulla-b-Alee translated Caraka Samhitā from Persian into Arabic by order of Yahya-b-Khalid.

For enthusiastic research workers, the vaults of Government Oriental Mss. Library, Madras (formerly at Tirupati); Scindia Oriental Institute, Ujjain; Sanskrit College, Calcutta; Dacca University P. O. Ramna; Bombay University Library; Bombay Branch of Royal Asiatic Society; Dahi Laxmi Library, Nadiad; Indian Museum, Calcutta; Nathadwara Library, Udaipur; Royal Asiatic Society of Bengal, Calcutta; Kottah State Library, Kottah; Bhandarkar Oriental Research Institute; Bharat Itihasa Samshodhan Mandal, Poona; Anandashram, Travancore University; D. A. V. College, Lahore etc., can provide valuable materials to work upon.

चरकसूलग्रन्थस्थपीणां नामानि निर्देशश्च

अगरत्य	सू. अ. १. वि. अ. १ पा. ४
अङ्गिरा	सू. अ. १. वि. अ. १ पा. ४
अत्रिः	वि. अ. १. पा. ४
अभिजित्	सू. अ. १.
असित	सू. अ. १. वि. अ. १. पा ४ सि. अ. ११
आत्रेय (पुनर्वसु)	सू. अ. १. सू. अ. १२ सू. अ. २५ सू. अ. २६ शी. अ. ३
आश्वरथ्य	सू. अ. १.
आश्वलायन	सू. अ. १.
अपिङ्गल (कपिङ्गल)	सू. अ. १.
कश्यप	सू. अ. १ वि. अ. १. पा ४
काङ्कायन (बाह्लीकभिषक्)	सू. अ. १ सू. अ. १२ सू. अ. २५ सू. अ. २६ शा. अ. ६
कात्यायन	सू. अ. १
काण्व	सू. अ. १. सू. अ. १२ सि. अ. ११
कुमारभिरा भरद्वाज	सू. अ. १२ सू. अ. २६ शा. अ. ६.
कुश सङ्ख्यसायन	सू. अ. १२
कुशिक	सू. अ. १
केश्य	सू. सू. १
कौण्डिन्य	सू. अ. १
कौशिक	सि. अ. ११
गार्ग्य	सू. अ. १
गालव	सू. अ. १
गौतम सङ्ख्य	सू. अ. १ वि. अ. १. पा ४ सि. अ. ११
जनक वैवेह	शा. अ. ६
जमदग्नि	सू. अ. १
देवल	सू. अ. १
धन्वन्तरि	शा. अ. ६
धौम्य	सू. अ. १
नारद	सू. अ. १
निमि वैवेह	सू. अ. २६
पाणि(री)धि (मोद्वत्य)	सू. अ. १ सू. अ. २५
पुलस्त्य	सू. अ. १ वि. अ. १ पा ४ सि. अ. ११
पर्णाक्ष मोद्वत्य	सू. अ. २६

पैत्रि

वडिश (धामार्गव)

बादशयण

भद्रकाप्य

भद्रशौनक

भरद्वाज

भरद्वाज

भार्गव ज्यवन

भिक्षु अत्रेय

भृगु

भारीवि का(+)व्यप

भार्वाङ्ग

भैत्रेय सतायनि

लौक्य (लोबाङ्ग)

वसिष्ठ

वामक (काशीपति)

वासः

वाक्षि

वार्योविद राजर्षि

वालखिल्य

विश्वामित्र

वैखानस

वैजवापि

शरलोमा

शर्कराक्ष

शाकुन्तेय ब्राह्मण

शाकुन्तेय

शाण्डिल्य

शौनक

सांख्य

हिरण्याक्ष कुक्षिक

सू. अ. १

सू. अ. १. सू. अ. १२. सू. अ. २६. शी. अ. ६. सि. अ. ११.

सू. अ. १.

सू. अ. २५. सू. अ. २६. शा. अ. ६.

शा. अ. ६. सि. अ. ११.

सू. अ. १.

सू. अ. २५. शा. अ. ३.

सू. अ. १. चि. अ. १. पा. १.

सू. अ. १. सू. अ. २५.

सू. अ. १. चि. अ. १. पा. ४. सि. अ. ११.

सू. अ. १. सू. अ. १२. शा. अ. ६.

सू. अ. १.

सू. अ. १. सू. अ. १०.

सू. अ. १.

सू. अ. १. चि. अ. १. पा. ४.

सू. अ. २५. सि. अ. ११.

सू. अ. १. चि. अ. १. पा. ४.

सू. अ. १.

सू. अ. १२. सू. अ. २५. सू. अ. २६

सू. अ. १. चि. अ. १. पा. १.

सू. अ. १.

सू. अ. १. चि. अ. १. पा. १.

सू. अ. १.

सू. अ. १. सू. अ. २५.

सू. अ. १.

सू. अ. २६.

सू. अ. १.

सू. अ. १.

सू. अ. १. सू. अ. २५. सि. अ. ११.

सू. अ. १.

सू. अ. १. सू. अ. २५. सू. अ. २६.

चरकटीका—ग्रन्थकर्तृणां नामानि निर्देशश्च

अगरतय (कायचिकित्सातन्त्रकार)	सू. १ | ६२.
अग्निवेश (कायचिकित्सातन्त्रकार)	सू. ३-१७ चि. ३-१८७, ७-६४, ४-७२.
अग्निवेशसंहिता (कायचिकित्साग्रन्थ)	चि. ३ | १८७.
अङ्गिरि (चरकव्याख्याकार)	सि. १ | २१.
अश्वतथक	सू. ७ | ४०.
आत्रेय (कायचिकित्सातन्त्रकार)	चि. ३ | १९९.
आषाढवर्मा (चरकव्याख्याकार)	चि. ३ | २१७, २३ | १३९.
ईश्वरसेन	चि. १५ | ९३, सि. १ | २१.
कपिलबल (कायचिकित्सातन्त्रप्रणेता)	सू. ७ | ५०.
कमलशील (तत्त्वसंप्रद्व्याख्याकार)	सू. ११ | २५.
कराल	चि. २६ | १३१
काश्मीर	चि. ३ | १२७, २५ | ४३.
काश्यप	वि. ८ | १२५.
काश्यप (अगदतन्त्रकार)	चि. २३ | ३२.
कृष्णात्रेय	चि. ३ | १९९.
क्षारपाणि (कायचिकित्सातन्त्रप्रणेता)	सू. ८ | १८, २१ | ४३.
खरनाद	चि. ३ | ७४, १३७.
चन्द्रिका (चरकव्याख्या)	सू. २७ | १६४.
चक्र काश्मीरपाठ	चि. १३ | ११५.
उत्कर्ण (कायचिकित्सातन्त्रप्रणेता)	सू. १ | २, ४४; ३ | ३३.
जैमिनी (चरक-सुश्रुतव्याख्याकार)	चि. १ | २२.
द	चि. ३ | १९९.
द	चि. ३ | ७४.
न (१४ वा सूत्रप्रणेता)	चि. २७ | २६७.
नि	इ. १ | ३.
न	सू. १ | ४८. चि. ८ | ३६.
प सप्रह (वैशेषिक)	सू. १ | ५०.
प कायचिकित्सातन्त्रकार)	चि. १५ | ३५ चि. १ | ३०.
प तिक	चि. २ | १३९.
प	सू. १ | १.
प	चि. ३ | १६०, १३ | ९८, २० | २३.
प	सू. १ | ४५, ७ | ५०.
प	चि. २ पा. १ | १५.

भरद्वाजः	सू. १ | ५.
ब्रह्मदेवः (चरकव्याख्याकारः)	चि. ३ | २३७
कालकिः (शल्यतन्त्रकारः)	चि. ३ | १०८, १०९
भासदत्तः (चरकव्याख्याकारः)	चि. ३ | २१७
भीमदन्तः ()	चि. १० | ५३
भेलः (कायचिकित्सातन्त्रप्रणेता)	चि. ३ | २८६
भोजः (शल्यतन्त्रप्रणेता)	चि. १५ | १७, ९३
मनुस्मृतिः (धर्मशास्त्रम्)	सू. १ | ४८
वराहपिहिरः (बृहत्संहिताप्रणेता)	इ. १२ | ७०
विदेहः (शालाक्यतन्त्रप्रणेता)	चि. २६ | १३१, १४३
विशाखी (नाट्यशास्त्रकारः)	चि. ७ | ७
विश्वामित्रः	सू. २७ | २१२ चि. ५ | ७३
वृद्धकश्यपः (अगदतन्त्रकारः)	चि. २३ | १४
वैशेषिकसूत्रम्	सू. १-१-सू. १ | ४४
व्याकरणनृभाष्यम्	सू. अ. १ | १
व्यासः (महाभारतपुराणादिकर्ता)	सू. १ | ३ चि. ३ | २४
वाग्भटः (अष्टाङ्गसंग्रहाष्टाङ्गद्वययोः कर्ता)	सू. १ | ३१, ६६
शान्तिरक्षितः (तत्त्वसंग्रहकारः)	सू. ११ | २४.
शालाक्यम् (विदेहप्रणीतम्)	सू. २ | ६. ५ | ७, १७.
शौनकः	सू. ४ | ७. चि. ३ | १९९.
सायकिः (शालाक्यतन्त्रकारः)	चि. २६ | १३१.
मुधुतः (शल्यतन्त्रप्रणेता)	सू. १ | २, ५७.)
सूदशास्त्रम् (पाकशास्त्रम्)	सू. ३ | १७. ३० | २७.
सैन्धवः (चरकटीकाकारः)	चि. १ | २१.
सांख्यकारिका	शा. १ | १७, ३०.
स्वामिदासः (चरकव्याख्याकारः)	चि. ३ | २१७.
हरिवंशः (महाभारतस्य खिलपर्वे)	सू. १ | २.
हस्तिवैद्यकम् (पालकाप्यप्रणीतम्)	सू. ५ | १८.
हारीतः (कायचिकित्सातन्त्रकर्ता)	सू. १ | ३१, ७३ २१ | ४३.
नन्धशास्त्रम्	चि. २८ | १५६.
चक्षुष्येणः	चि. ७ | ६४.
धौरस्वामिरक्षः (चरकवार्तिककारः)	चि. ५ | ९४.

चरकसंहितायां पाठान्तरार्थमुपयुक्तानि पुस्तकानि।

क्रमाङ्कः	संज्ञा	पुस्तकनाम	प्रकाशनवर्षम्	आवृत्तिः
१	क	हरिदाससंस्कृतग्रन्थमालायाः प्राप्ता पंडिततारादत्तपन्तेन संशोधिता चरकसंहिता	सं. १९९४	
२	ख	श्रीनरेन्द्रनाथशास्त्रिणा परिशोधिता	इ. स. १९२९	प्रथमा
३	ग	एल्फिन्स्टनकोलेजपुस्तकालयात् प्राप्ता हस्तलिखिता चरकसंहिता	.....
४	घ	जयदेवविद्यालंकारेण कृतया हिन्दीटीकया युक्ता चरकसंहिता	सं. १९९१	प्रथमा
५	च	योगीन्द्रनाथसेनमहोदयेन कृतया संस्कृतटीकया युक्ता चरकसंहिता	इ. स. १९२०	प्रथमा
६	छ	चरकसंहिता (मूलमात्रम्) श्रीयादवजीआचार्येण परिशोधिता	” १९३३	तृतीया
७	ज	हरिदत्तशास्त्रिणा संशोधिता चक्रपाणिजेज्जटटीकायुता चरकसंहिता	” १९४०	द्वितीया
८	झ	यशोदानन्दनसरकारेण कृता बंगालीभाषान्तरयुता चरकसंहिता	” १९३०	तृतीया
९	ट	सिंहपतिप्राप्तहस्तलिखिता चरकसंहिता	सं. १८०५	
१०	ठ	तेलुगुभाषान्तरेण युता	इ. स. १९३५	प्रथमा
११	ड	श्री गुलाबकुंवरवाआयुर्वेदपुस्तकालयप्राप्तहस्तलिखिता चरकसंहिता	सं. १८८१	
१२	ढ	‘श्रीभाण्डारकरीसर्वहन्स्टिट्यूट’-प्राप्ता हस्तलिखिता चरकसंहिता No. 64	.....
१३	त	शंकरदाजीपदेकृतया मराठीटीकयोपेता चरकसंहिता भा. १-१४	इ. स. १९२६	
१४	थ	‘श्रीभाण्डारकरीसर्वहन्स्टिट्यूट’-प्राप्ता हस्तलिखिता चरकसंहिता No. 67	” १८६८	
१५	द	कविराजगंगाधरकविरत्नेन कृतया संस्कृतटीकयोपेता चरकसंहिता	श. १८४९	
१६	ध	निर्णयसागरप्रेसप्रकाशित-चक्रपाणिदत्तटीकायुत-चरकसंहितायाः पाठान्तराणि	इ. स. १९४१	तृतीया
१७	प	योगीन्द्रनाथसेनकृतटीकायुतायाः चरकसंहितायाः पाठान्तराणि	इ. स. १९२०	प्रथमा
१८	फ	चरकसंहितायाः मूलमात्रायाः पाठान्तराणि	” १९३३	तृतीया
१९	ब	पञ्चावयुनिधिसिद्धी-प्राप्ता हस्तलिखिता चरकसंहिता	सं. १७०६	



PRESENTATION OF CARAKA SAMHITA

To

Dr. RAJENDRAPRASAD

The First President of Independent Bharat

By

H. H. THE MAHARANI SHREE GULABKUNVERBA SAHEBA

The President of Shree Gulabkunverba Ayurvedic Society

on the 14th of May 1951 at Jamnagar.



I rejoice that here before Dhanvantari
The blessed Lord of immortality
I offer you, free Bharat's chief and sage
This treasured lore from a most ancient age,
The lore of healing that makes happy and whole
Disease-infested body, mind and soul;
Thus do I pass the torch lit long ago
That you may spread its glow afar and throw
Its soothing light upon the anguished heart
Of man; This the mission and this the art.

लेफ्टेनण्ट जनरल हिज हाइनेस ना. महाराजा जामसाहेब श्री सर दिग्विजयसिंहजी
साहेब बहादुर ऑफ नवानगर, जी. सी. एम. आइ., जी. सी. आइ. ई.
ना. राजप्रमुख—सौराष्ट्र
पेट्रन - श्रीगुलाबकुंवरबा आयुर्वेदिक सोसायटी

जामनगर

भारत



Lt.-General His Highness Namdar Maharaja Jam Saheb Shree
Sir Digvijaysinhji Saheb Bahadur, G.C.S.I., G.C.I.E.
The Rajpramukh Of Saurashtra

Patron

Shree Gulabkunverba Ayurvedic Society

Jamnagar

India

FOREWORD

These lines by way of a foreword are penned in no mere conventional spirit. The translation and publication of so ancient a work, when the world is busy progressing on to new enterprises and untrodden paths of scientific achievement requires a word of explanation.

Despite the varying circumstances of social and personal life, deep down in man the impulses of life remain the same now as thousands of years back. His ailments, both somatic and psychic, still derive their source from the disturbances in his general make up. Hence in spite of the newer forms of life and expression, his dominant nature has to be understood and evaluated in terms that hold good for all time. It is here that the distinction between the old and the new vanishes and the values of ancient wisdom become as valid today as when first it was propounded.

We are today at a turning point in human history and every step forward must be determined after a full appraisalment of the forces of the past as well as of the present. Neither force can be ignored if the future is to be free from mistakes and regrets as well as from precipitate folly. The future must be a natural growth and upsurge from the present, with its roots deep down in the past history of mankind. Hence, all sudden departures are attended with heavy penalties and dangers to orderly and safe progress. Evolution and not revolution is the law of life and this applies with greater force to medicine than to any other field of human affairs.

It is with this ardent desire to help us at this critical moment to advance and progress in the right direction and to obviate the risk of error and trials that this light from the heavy past is unveiled. This

knowledge has a living continuity of study and practice for more than a thousand years and amidst more than a fifth of the human race and in a land which has always been the meeting place of all countries and cultures and which has assimilated the best of wisdom from all sources.

Mr. Winston Churchill's aphoristic statement before the Royal College of Physicians (March 1944) that "the longer you can look back, the further you can look forward", embodies an eternal truth. The past, at least in the realm of knowledge and medical knowledge at that, is not merely of antiquarian interest, but is replete with suggestions and possibilities for the future. The Caraka Saṃhitā with its firm grasp of the very roots of life and of the working of the human organism can serve as an eternal touch-stone for evaluation of newer and yet newer findings in the field of health and therapeutics. There was a general desire to fully understand the origins of medicine in India, and despite an earlier translation of the work, the Caraka Saṃhitā in a form intelligible to the scholar, practitioner and layman alike remained a desideratum. It is to fulfil this general need that the present effort was undertaken.

Besides, there are other and more vital circumstances that have been responsible for bringing out and shaping the present work. Since a quarter of a century India has throbbed to the cadence of a new life, a new awakening and harmony, in which were blended the echoes of her ancient voice with the notes struck on the strings of a new lyre. There has been a struggle and a travail, for her fidelity to the eternal note in her culture has had to be reconciled to the love of a quick pace in the pursuit of comfort, comradeship and material grandeur. And in a large measure this harmony has been achieved in the realms of her politics, literature, art and social dynamics.

This last one, viz., the dynamics of social progress, is a vast

field comprising the ethical, economic, hygienic and sanitary well being of the nation. Leaving religion and economics apart, medicine is the largest factor that ensures the proper safeguarding of social well-being. And a total bankruptcy in this regard in the age-old traditions and history of a people, is bound to cast a deep reflection on their claim to civilization. But the fact that India has come down through the ages with her intellectual, spiritual and physical health intact, is a positive proof calculated to dispel apprehensions of the kind, and on a closer scrutiny, the truth is seen to lie all on the other side. Her racial and cultural integrity and soundness are the fruits directly of her deep interest in and cultivation of the science and art of health and healing.

The new revival in her art and letters, and her aspiration for political independence, did naturally awaken her interest in the past of her medical history and achievement, and led to the joy of a glorious discovery. She is therefore proud of her achievement and desires intensely to base her future endeavour and progress in that vital realm on those secure foundations. This inevitably has led to the medical revival with which we are familiar today.

Some eight years back the Gulābkunverbā Āyurvedic Society of Jamnagar was formed with an anticipation of this eventuality that was to come, and as a first but inevitable step in the fulfilment of that vision, the publication of the great classics of Indian medicine rendered into the foremost modern Indian languages and into English, the international language of today, was undertaken. The full gravity of the task was slowly realised only after entering upon it. Nevertheless, the publication of the most significant of those ancient works, the Caraka Saṁhitā, the present work, has given the needed experience and understanding of the nature and extent of the work that is to be accomplished before the true spirit of the author dawns on our minds.

In this task we have kept an eye on the lessons that parallel situations to ours in the history of nations have to give us. Similar arduous work of translation and interpretation of Hippocrates and other ancient Greek writers undertaken by great scholar-pioneers of the European renaissance has been specially taken note of and has served as an incentive to our endeavours.

We may frankly admit that the element of sentiment has not been altogether absent in the motivation of this undertaking. For, before we could actually delve deep into the classics that revealed to us their unforeseen treasures, the incentive derived much of its strength from fond sentiment and attachment to what was one's own. Nevertheless, it was our sincere resolve never to allow our sentiment to get the better of our reason, and the subsequent repayment we have derived from these delvings into ancient lore, have justified our reliance on sentiment to even such an extent. We find, as we shall be able to show in the course of this preface, that the great masters that first propagated the medical science in India, always held reason above all else as guide to human action, and revelation the only source into realms where reason holds no sway.

We did not start on this task with any ambition to achieve unprecedented profundity or originality in the work. We were content to have produced a readable and a reasonably correct translation of the texts and not stand between the author and the reader in any degree. If we have succeeded in that, we have cause to feel satisfaction. But at no time have we lost sight of the fact that the ancient texts have to be rendered intelligible to the readers placed in the context of modern life, language and patterns of scientific thought. If our achievement bears out this, its object will have been fulfilled.

The Gulābkuṇverbā Āyurvedic Society owes its origin and steady growth to the enterprise and idealism of Her Highness the

Maharani Shri Gulabkunverba Saheba of Jawanagar, who is its president and founder patron and the active support of His Highness the Maharaja Jani Saheb Shri Digvijaysinhji Saheb Bahadur. Their foresighted wisdom is behind the initiation of the Āyurvedic institute, museum, library and the Vidyālaya.

In the prosecution and fulfilment of our endeavours, we have had to contend against manifold adverse factors. We acknowledge with gratefulness, the ready and unstinted aid we have received both in the shape of handsome donations as well as of advance subscription to our publication from the hands of Her Highness the Maharani Shri Gulabkunverba Saheba, the great merchant princes of Ahmedabad and Bombay and the enlightened public all over India. But for their understanding, sympathy and cooperation, the completion of the present work as well as of the various other practical undertakings of the society would not have been possible. We, along with the general public that is interested in the advancement of the medical science, are greatly indebted to them for their timely and ungrudging patronage.

Lastly, a word in praise of our subscribers. They have shown admirable patience, having paid up in advance, part of the book-price, in waiting for years to get this publication. Owing to unforeseen factors during the war as well as in the post-war conditions, the publication has been delayed. But now that it is in the reader's hands, we shall feel justified in the delay if it has enabled the work as a whole to gain in its quality. Four or five years of devotion to a book that has come down through the ages in the history of a people and which has lain almost forgotten and neglected for centuries, is a pardonable lapse if at all, and quite a virtue if at the end of it, the enlightened public is able to gain easy and profitable access to the wisdom sealed in the original of the work.

No one can be more aware of the deficiencies in the translation

than we are, but all the draw-backs, by way of both omission and commission, in the translation of so great and ancient a book, fade away from view if the spirit of the words has remained untampered with and made abundantly evident. It is the over-adherence to the letter that killeth and not the over-emphasis of the spirit.

We are fully aware of the many deficiencies of the work under review such as lapses of translation and mistakes of printing, transliteration and the absence of elaborate critical notes and comments.

But these we hope to eliminate in subsequent editions and efforts, and shall be contented for the present if the main object of this effort is fulfilled viz., that the generality of our readers are able to obtain the sense of the original passages, without hindrance and obscurity. Even as it is, this enterprise has cost us Rs. 400 000, and in view of this our sincere desire to make no profit on it, our price will, we hope, be regarded as modest and the least possible under these circumstances.

Now a word more needs to be said in view of the vital changes of the circumstances of our national life. We are a free and independent people and our future progress in all branches of life and thought should be based on and should derive its strength from the soil on which we live and thrive. Unrelated to our past, our national life and thought should prove fruitless. Medicine, the most vital among the branches of science, should not be completely unrelated to the past history and habits of the race. Like food, medicine has its local as well as its universal aspect. Ancient works like the present one will help us to realise the basic strength or weakness that lies behind our racial life and history, and will play a great part in the shaping of the future destiny of our scientific progress and fulfilment. Hence there is a greater need than ever before for a thorough investigation into the past of our medical history. Even from this point of view, the present work must be a notable contribution.

We acknowledge our thanks to His Highness The Maharaja Jam Sahab Shri Digvijaysinhji Sahab and Her Highness the Maharani Shri Gulabkunverba Saheba, who together by their constant interest and personal supervision, have been a source of unfailing encouragement and support to our efforts.

Our special thanks are due to Vaidya Shri Jadhavji Trikamji Acharya (Ayurveda Martanda), and Sjt Shastriji Durgashanker Kevalram, for they have helped us with their invaluable personal advice and suggestions throughout the long period of the preparation of this work. They have helped to revise and correct the manuscripts sitting with the staff of our institute week by week.

We acknowledge our indebtedness to Shri Amulakh Amichand of Bombay, and Sjt. Ishvarlal G. Bhagat and Sjt. Nandlal Bodivala of Ahmedabad, for their generous cooperation in enlisting a great number of subscribers.

We also thank (1) Sheth Chatrabhuj Gordhandas, (2) Sheth Amritlal Oza, (3) Sheth Premchand Vrajpal Shah, (4) Sheth Mangaldas H. Patel and (5) Sheth Jethalal Jhaverchand Patalia, for the donations they have made to this publication.

To the libraries and institutes that have helped us with the manuscripts necessary in the fulfilment of our task for reference and consultation, we acknowledge our sincere thanks for their very helpful attitude and ready cooperation.

Moreover, we express our deep indebtedness to a great number of our friends and well-wishers for their invaluable advice and sympathy in our efforts.

Lastly, we thank Sjt. Gunvantray Acharya, the Printer, Sjt. Jesingbhai Lalan, the binder, and Sjt. Panchanbhai Vara, the Photographer, for their co-operation in the preparation of these volumes.

A word more needs to be added about the nature of the contents of the six volumes which the present work comprises of. The first volume contains the preface intended to acquaint the reader with the various aspects of the work. The actual text itself, with its word for word meaning in Hindi and Gujarati and verse by verse translation in English and various readings in the foot-notes, runs into the three succeeding volumes viz., 2nd, 3rd and 4th volumes. The fifth is the running translation in each language and the sixth volume contains the indices of subjects, such as diseases, recipes, drugs etc., and diagrams and pictures of the flora and fauna related to the work. Thus these six volumes form the full set of the Caraka Samhita, useful alike to the student, scholar and general practitioner.

We shall be deeply grateful to our readers for any suggestions towards remedying the deficiencies or likely errors in the present work.

हर हाइनेस अ. सौ. ना. महाराणी श्री गुलाबकुंवरबा साहिबा ऑफ नवानगर

प्रमुख - श्रीगुलाबकुंवरबा आयुर्वेदिक सोसायटी

जामनगर

भारत



Her Highness Maharani Shree Gulabkunverba Sahiba Of Nawanagar

President

Shree Gulabkunverba Ayurvedic Society

Jamnagar

India

CHAPTER I

THE HISTORY OF MEDICINE IN INDIA

The History of Medicine is both history and medicine as expressed significantly by Dr. Henry Sigerist. As history, it must show a chronological order and the dates and definite periods of the great leaders and teachers of medical thought and practice. As medicine, it must represent the gradual unfoldment of ideas from the most primeval beliefs and fancies. It must be a gradual or a radical transition from stage to stage of medical concepts, of the discovery and utilization of the treasures of plant, mineral and animal products, and the systematic and ever-widening study and observation of the processes in the human organism in health and disease. Are we in a position to compile and present to the world such a regular and comprehensive picture of the history of medicine in India?

The answer, to our great regret, is in the negative. The causes for such a condition are many and varied. The foremost of them is that medical history is a part and parcel of national and regional history. Thus unless the facts of chronology and of the political and cultural history of India are fully established, it would not be feasible to attempt similar portrayal of the medical part of Indian history. However important medicine, science and philosophy may be, each one of them is but an aspect of the total life of a people and is the off-shoot and a tributary of the whole national or racial life.

The difficulties met with in any attempt at writing a regular history of the evolution of medicine in India have been fully considered by Castiglioni in his great volume of History of Medicine, in the chapter dealing with Persian and Indian medicine. To most authoritative historians of India, nothing is certain before 326 B. C., the invasion of Alexander, or at any rate before the seventh century B. C. i. e. the

CHAPTER I

THE HISTORY OF MEDICINE IN INDIA

The History of Medicine is both history and medicine as expressed significantly by Dr. Henry Sigerist. As history, it must show a chronological order and the dates and definite periods of the great leaders and teachers of medical thought and practice. As medicine, it must represent the gradual unfoldment of ideas from the most primeval beliefs and fancies. It must be a gradual or a radical transition from stage to stage of medical concepts, of the discovery and utilization of the treasures of plant, mineral and animal products, and the systematic and ever-widening study and observation of the processes in the human organism in health and disease. Are we in a position to compile and present to the world such a regular and comprehensive picture of the history of medicine in India?

The answer, to our great regret, is in the negative. The causes for such a condition are many and varied. The foremost of them is that medical history is a part and parcel of national and regional history. Thus unless the facts of chronology and of the political and cultural history of India are fully established, it would not be feasible to attempt similar portrayal of the medical part of Indian history. However important medicine, science and philosophy may be, each one of them is but an aspect of the total life of a people and is the off-shoot and a tributary of the whole national or racial life.

The difficulties met with in any attempt at writing a regular history of the evolution of medicine in India have been fully considered by Castiglioni in his great volume of History of Medicine, in the chapter dealing with Persian and Indian medicine. To most authoritative historians of India, nothing is certain before 326 B. C., the invasion of Alexander, or at any rate before the seventh century B. C. i. e. the

acceptance. Some others, taking a wholly superficial view and being repelled by its seemingly queer methods and concepts, rejected it as holding no validity for modern times.

We shall have to steer clear of all these prejudices and predilections and attempt to construct a faithful history of its evolution first and then launch upon an inquiry into its validity for then, for now or for ever.

What are then the sources that are helpful to such an end? Apart from the conventional list of the sources of history we have today in India a vast field opened up by the excavations of Mohenjo-daro and Harāppā and our vision is carried back to thousands of years before the period from which we formerly hoped to begin our history.

This may not be Vedic or Āryan in its nature, but what is that to us who are concerned with history and history of medicine as such, in its wide all-embracing human aspect. Whether Drāviḍian or Āryan or whatever else, the large roads, aqueducts, drains, baths and other sanitary features of the civic and domestic life revealed in these excavations presuppose a highly developed sense of health and sanitation. It is but natural to suppose that such a civic and domestic sanitary sense must be based on and supported by a knowledge of disease and medicine of no mean order. The innumerable inscriptions, tablets and material waiting study and deciphering will surely yield rich results pertaining to the medical wisdom attained by that civilization. Mineral pitch and other drugs and chemicals that were in use in those days reveal a high degree of medical knowledge. Next the study of the Vedas, the oldest record of Āryan wisdom and perhaps of human wisdom itself, is still a fertile source and if studied minutely from the medical researcher's point of view, much material of an unprecedented kind is bound to come to light. The Atharva Veda is of special significance in this context.

1. In India, there are living traditions of practical therapeutics handed down from teacher to disciple obtaining in various obscure parts, which tradition and lore are not embodied in any written

record of medicine. These have to be tracked down and investigated. There is a variegated field of priestly, magical and empirical medicine and special ophthalmic, surgical and medical manipulations that are quaint but often effective and they must be properly studied and understood and embodied in the record of medical history. The literature of the post-Vedic period, the Brāhmaṇas, the Tantras, the Rāmāyaṇa, the Mahābhārata and the Purāṇas as well as the literature of the classical times contain innumerable references to medical topics and are yet to be thoroughly ransacked and codified. The literatures of Buddhism and Jainism are a fertile source of information for the history of medicine.

2. Ancient monuments in the form of inscriptions on monoliths, stone-tablets and metal plates are a fruitful source. The edicts of Aśoka resembling as they do the edicts of Darius the great, on the rock of Behistun in Persia contain references to his medical benevolence and injunctions to his subjects in the observances of sanitary regulations and attention to men and animals in disease and distress and to the usefulness of hospitals. Much valuable material may yet be gathered from these and such other sources.

3. Paintings and other art-forms such as icons, friezes and frescos, such as are still preserved in caves and temples like Ajantā, Ellorā and the Buddhist Stūpas of Amarāvati and Nāgārjuna Konda contain much material for the keen eye of medical research.

4. Instruments and appliances prevalent in various parts and preserved in various museums.

5. Medical literature both in Sanskrit and in the vernaculars, and oral as well as written traditions of folk-lore, proverbs etc.

6. The medical literature of neighbouring countries and the general literature such as travellers' memoirs and pilgrims' travels of the surrounding countries with whom India has had contact since the most ancient times.

7. As an example of how ancient works of art reveal, to the searching eye of the medical investigator, features of value to the

record of medicine. These have to be tracked down and investigated. There is a variegated field of priestly, magical and empirical medicine and special ophthalmic, surgical and medical manipulations that are quaint but often effective and they must be properly studied and understood and embodied in the record of medical history. The literature of the post-Vedic period, the Brāhmaṇas, the Tantras, the Rāmāyaṇa, the Mahābhārata and the Purāṇas as well as the literature of the classical times contain innumerable references to medical topics and are yet to be thoroughly ransacked and codified. The literatures of Buddhism and Jainism are a fertile source of information for the history of medicine.

2. Ancient monuments in the form of inscriptions on monoliths, stone-tablets and metal plates are a fruitful source. The edicts of Aśoka resembling as they do the edicts of Darius the great, on the rock of Behistun in Persia contain references to his medical benevolence and injunctions to his subjects in the observances of sanitary regulations and attention to men and animals in disease and distress and to the usefulness of hospitals. Much valuable material may yet be gathered from these and such other sources.

3. Paintings and other art-forms such as icons, friezes and frescos, such as are still preserved in caves and temples like Ajantā, Ellorā and the Buddhist Stūpas of Amarāvati and Nāgārjuna Konda contain much material for the keen eye of medical research.

4. Instruments and appliances prevalent in various parts and preserved in various museums.

5. Medical literature both in Sanskrit and in the vernaculars, and oral as well as written traditions of folk-lore, proverbs etc.

6. The medical literature of neighbouring countries and the general literature such as travellers' memoirs and pilgrims' travels of the surrounding countries with whom India has had contact since the most ancient times.

7. As an example of how ancient works of art reveal, to the searching eye of the medical investigator, features of value to the

Brhatjātaka, Kautilya, Rasasāstra or alchemy are still available and contain medical references whose full significance still awaits investigation.

It is not, however, our purpose to overburden these pages with a list of the many sources from which material for a history of medicine in India could be gathered; nor do we suggest that so few scholars have not attempted such a task in some measure or other. We feel that if these sources are more fully explored with an eye to finding material for medical history, they will yield adequate enlightenment on the state and evolution of medicine in India from the earliest times, going back to pre-Aryan civilization of the Indus valley and afford opportunity for joining scattered data into a whole.

We hope thus to reclaim much territory for history which is now covered by the mists of picturesque legend and myth. It is interesting to note that Castiglioni in his volume of History of Medicine remarks that 'India offers all the attraction of a large and marvellous museum in medicine as in other fields, the magic practices of the primitive people, the cult of stones and trees, the belief in amulets and charms, the peripatetics or travelling physicians and ambulant doctors of Greek description, the scholastic, pedantic, dogmatic and the most modern type of specialists are found in actual active practice shoulder to shoulder. All the stages of evolution of the science of medicine from instinctive, empirical, magical, priestly, religious, metaphysical and scientific practice, thus all the stages of evolution of medicine are represented in this country'. This will give an important link to connect the list of medicine of the whole world.

The question of Chronology

Despite all that we have said and hoped for the purpose of chronology, we have no landmarks to guide us in our sallies into ancient history of medicine in India, beyond the invasion of Alexander and the time of the Buddha calculated from the former date. As we shall see later in the course of these pages, the great medical teachers Bharadvāja (भारद्वाज), Ātreya (आत्रेय), Divodāsa (दिवोदास) and

Suśruta(सुश्रुत) are much anterior to the Buddha and even the time of the Mahābhārata. Though we may not assign exact dates to these teachers and their times, we shall yet indicate the successive order of the periods they occupied, in the light of the racial and traditional history of the Indian people.

The excavations of the Indus valley reveal the possibility of a long and rich period of civilization before the entry of the Vedic Āryans into India. Thus there is a pre-Vedic period of Indian civilization and consequently of Indian medicine which must have inevitably resulted from and enriched that civilization.

From the actual record of medical wisdom in the Vedas, though in its most rudimentary forms, we have a Vedic period of medicine.

Next as the consequence of the elaborate ritual of the sacrifice and the discussions, assemblies and discourses associated with it during its long performance, there emerged a systematic and rational method of exposition of philosophy and of medicine. This is the great Brāhmaṇa period of philosophy and also the Saṃhitā period or the period of systematic codification of medicine. This may justly be called the scientific era of medicine in India. Āyurveda then attained its age of maturity emerging from its nonage of Vedic medley of charms and simple drugs, of incantation and magic-ritual, into the maturity of a rationally expounded science of health and disease and a systematic practice of remedies, related to case, time and constitution. This lasted from the time of Atreya up to the end of the seventh century after Christ i. e. almost till the beginning of the Mohammedan invasion of India. This millennium was the heyday of Āyurveda, the golden era in the medical history of India, comparable to that of Hippocrates and Galen in the West. This was followed suddenly by dark centuries of stagnation, neglect and decay, when the original texts fell into disuse and the noble professions of the surgeon and the physician fell into even disrepute. It was a mode of seeking a mean livelihood and the practisers of it degenerated into pretentious charlatans, ignorant and wily, avaricious and mean. The Smṛtis and the codes of social observances stigmatized these professions by making their members unworthy of attendance at ceremonial

dinners. They were (अथर्व) to be unworthy of sitting in a line with one at meals. The later editors and commentators like Mādhava, Ākrapāṇi, Śārngadhara, Bhṛṅgarā and others helped merely to keep alive the ancient works and their lore from being totally lost. They were evidently aware of the decadent condition of the science and under the circumstances of social life and political upheavals in their days, they could not have done better.

It is necessary to remember that at the time of Mādhava, the great Vijayanagara empire of the south was the bulwark of Sanskrit culture and sciences. The great Vedic commentary of Śāyana and the Nidāna of Mādhava point to a revival of Vedic traditions in philosophy, science and art. The Siddha and other traditions of the south received a fillip from the rulers of the empire and the remnants of ancient medical practices and methods alongside the local traditions of Agastya, Siddha and other systems that subsist even today in the south owe their survival not a little to the spirit of renaissance born and maintained in the days of the Vijayanagar empire. But that renaissance was short-lived and was enveloped by the spreading darkness of political instability in India during the Mohammedan period and the later vicissitudes of Moghul, Maratha and East India Company's fortunes. With the establishment of the British rule, the flood of western culture, science and medicine, upheld and patronised by the state, put off all chances of recovery for the Indian system of medicine. It is only in the latter days of British rule, that Āyurveda attracted the notice of the enlightened among the rulers as well as the ruled, partly as a result of the scholarly interest of orientalisists of the west and partly of the growing claims of the nationalist spirit of cultural renaissance in India.

With the attainment of full independence, India finds herself at the cross-roads and has to make her choice now. There is the impetuous call of the spirit of science in every heart desiring advancement and equality with other nations of the world and there is also the fond attachment to a hoary past, glorious but apparently not in accordance with what is now regarded as valid and reasonable. Not that it is irrational, but it derives its strength and support from tradition elaborated by a system of speculative and highly imaginative

reason. We are today facing a world steeped in the spirit of experimental science, analytical in method and verifiable by laboratory methods alone and which cannot brook abstractions that cannot be put into the test tube and shaken, however valid they may sound in themselves. But the difficulty of the task is minimised when we remember that between now and the Vedic age, there was a period of experimentation and research in the realm of medicine second to none in the history of world-medicine. This was the scientific period of medicine in India.

The Vedic Period of Ayurveda

Instinct is the inner compulsion that the animal organism feels in the choice of what is good and beneficial for its survival and protection. In the early man, this grew into the higher faculty of the mind called intuition. The propounders of Ayurveda thus knew that the protective power and device was ingrained in life itself and acquired varied expression in the plant, animal and man according to the exigencies that each of these stages of animation gave rise to. The plant developed its thorns and a thick coat of bark to prevent its easy vulnerability. Animals and birds knew by instinct what particular action or thing helped to get over an affliction. And equally naturally did the early man see with his mental eye the measures and things that relieved him of ailments. In Caraka, we find it expounded that there never was a time when Ayurveda did not exist, even as it was the case with life. The life-stream carried in its current its own supporting and protecting wisdom that became manifest at the beginning of each cycle of time to the seers. It is only in that sense that Ayurveda can be said to have a beginning. Otherwise it is as beginningless as life itself and runs parallel to it through all time (Caraka, Sutra. 30,27). The Veda thus naturally contains reference to such instinctive and intuitive origins of medicine.

Osler, the great writer on modern medicine refers to (1) natural phlebotomy which the hippopotamus knows for it thrusts itself against a sharp pointed reed in the river bank when it feels it needs phlebotomy, (2) the use of emetics by the dog, (3) the use

of enemata by the ibis. Berdoe refers to the use of valerian by cats, antitotal herbs for snake-poison by the mongoose, of plantago major by the toad, of salt by the cow, buffalo, horse and camel. Similarly licking of the wounds by the animals, stopping the bleeding by monkeys and other instinctive performances of remedial gestures and applications by animals and birds have been noticed and described by writers on the history of medicine. The Atharva Veda mentions the animals and birds from whom the use of healing herbs and drugs could be learnt.

काहो वेद वीक्षन् नकुलो वेद भेषजीम्
सर्पा गन्धर्वा वा विदुस्तु अस्मा अवसे हुवे ॥ २३ ॥

वाः सुगन्धां आङ्गिरसीदिव्या वा रघटो विदुः ।
वयं हिंसा वा विदुर्याश्च सर्वे पतत्रिणः ।
मृगा वा विदुरोऽधीस्ता अस्मा अवसे हुवे ॥ २४ ॥

६ वनीष भेषधीनां गावः प्राशन्त्यङ्ग्या यदतीतामृशवयः ।
द्वयैरुत्तमोऽधीः शर्म वच्छन्त्वाऽऽताः ॥ २५ ॥

अथर्व. वे. कांड ८., सू. ७.

"The boar knows the plant; the mongoose knows the remedial (herb); what ones the serpents, the Gandharvas know, those I call to aid for him. 23

What (herbs) of the Angirases the eagles know, what heavenly ones the Raghavas know, what ones the birds, the swans know, and what all the winged ones, what herbs the wild beasts know—those I call to aid for him. 24

Of how many herbs the inviolable kine partake, of how many the goats and sheep, let so many herbs, being brought, extend protection to thee. 25 "

The natural desires and inclinations of the ailing man are even now indications of his needs not to be disregarded by the attending physician. Suśruta is emphatic on the value of such inclination known as 'Prākāṅksā' (प्राक्कांक्षा).

Vedic medicine and post-Vedic medicine too have been guided in a great measure by what is known now as the doctrine of signature. The color, texture or shapes of things that were similar to the affected parts or elements of the body were indications to them of their usefulness as remedies and as replenishing agents. Thus substances that could tinge the fluids bright red were helpful in promoting the blood or in checking hemorrhages. Milk and other substances of its color and consistency were regarded promotive of the body-elements of similar texture and color like semen, and ojas or the protoplasmic cell-fluid. Osler mentions the use of plant eye-bright for centuries in diseases of the eye because the black speck in the flower suggested the pupil of the eye. Caraka mentions lac as beneficial in hemoptysis. The Atharva-veda mentions turmeric and yellow birds into which jaundice is charmed to enter, leaving the human patient.

उरो मत्वा क्षतं लाक्षां पयसा मधुसंयुताम् ।
सद्य एव पिबेज्जीर्णे पयसाऽद्यात् सशर्करम् ॥ १५ ॥ च. वि. ११

It is from such beginnings, that man guided by the instincts of the lower animals and the intuition of the best among his own species, has evolved the present complex system of the healing science, harnessing fancy, imagination and reason in the service of health and life.

With the awakening of his mind to the super-sensual reality behind life, he felt the need to propitiate by conduct and ceremony, the mysterious powers behind life in the form of gods, spirit and angels. Thus the Atharva-veda is a record of psycho-somatic technique of healing by a combined procedure of charms, prayers, incantations amulets and drugs. The Atharva-veda is a compendium of medicine in its various stages of evolution and contains the most primitive as well as highly advanced stages of therapy. A hymn recounts the four kinds of remedies or therapies that protect life. The therapies of holy chants, of the juices of plant and animal parts, of devotion to gods or naturo-therapy and of human contrivance by means of drugs—they are the therapies that protect life.

“आथर्वणीराहिरसौर्देवीर्मनुष्यजा उत ।
ओषधयः प्रजायन्ते यदात्वं प्राणजिःवसि ।”
अथर्व. वे. ११-४-१६

“ O, life! when you are propitious, the drugs of the Atharvans (charms), the drugs of the Aṅgirasas (juices of plant and animal parts), the divine drugs (prayers to sun, water and other natural elements) and the drugs of human artifice all bear fruition. ”

Thus even so long back as the Vedic times, they knew medicine in its various aspects of psycho-therapy, organo-therapy, naturo-therapy and drug therapy.

Snake-poison and other kinds of poisonous bites by the fangs of cruel animals were common in those times as the charms and drugs against their conditions are most common in the Atharva Veda. Toxicology as a special branch had already come into being with the Atharvans as a class of persons learned in charms and incantations against poison, sorcery and toxic conditions.

The combined therapy of drug and incantation was applied to somatic ailments as well; the fever, the king of them all, was known as Takman which yielded to both drug and charm each singly or both combined.

As regards the surgical and therapeutic skill, the physicians of the gods, the Aśvin twins, were wonder workers. They could replace the head of a man with that of a horse. They healed the withered hand of Indra after he wielded thunder against his foes.

अश्विनौ देवमित्रौ यज्ञवाहाविति स्मृतौ ।
 यज्ञस्य हि शिरश्छेदं पुनस्ताभ्यां संप्राहितम् ॥ ४१ ॥
 प्रसीर्णं दक्षताः पूष्णा नेत्रे नष्टे भगस्य च ।
 वज्रिणश्च मुजसतम्मस्ताभ्यामेव विक्रित्सितः ॥ ४२ ॥
 विक्रित्सितश्च शीतांशुर्गृहीतो राजयक्ष्मण ।
 सोमामिपतितश्चन्द्रः कृतस्ताभ्यां पुनः सुखी ॥ ४३ ॥
 भार्गवश्च वदनः कामी वृद्धः सन् विकृतिं गतः ।
 वीतवर्गस्वरोपेतः कृतस्ताभ्यां पुनर्धुवा ॥ ४४ ॥
 एतैस्त्वान्यैश्च बहुभिः कर्मभिर्मिश्रगुप्तमौ ।
 बभूवुर्गृधं पूष्यादिन्द्रादीनां महात्मनाम् ॥ ४५ ॥

"The Aświns who are the physicians of the gods are celebrated as the re-suscitators of sacrifice, for it is they that reunited the severed head of sacrifice. It is these two, again, that successfully treated Pūṣan when his teeth had become loosened, Bhaga when he had lost his eye-sight and Indra when his arm had become stiffened. These two, moreover, cured Soma, the moor-god, of consumption and restored him to his happiness when he had fallen from his state of good health. When Cyavana, the son of Bhṛgu, had become decrepit with loss of voice and body-lustre, as the result of old age, but hankered still for sense-pleasures, it is the Aświn pair that made him young once again. On account of these and many other miracles of healing, these two, the greatest of physicians, came to be regarded with honor by such great personages as Indra and others".

With adherence to the mode of sacrificial worship, the anatomy of the higher animals like the cow, sheep and horse were well known to the ancient Āryans. Though not often, even human sacrifice was practised which must have yielded a reasonably vivid picture of human anatomy. Wars with the rival tribes and clansmen on the north-west of India and with the dark chieftains of the natives "Dasyus" (देव्यु) must have necessitated to the acquisition of a degree of surgical skill.

A thorough investigation of the material in the Atharva-veda from the medical historian's point of view remains yet to be accomplished. There are 114 hymns in it devoted to medical topics. Fever, consumption, various wounds such as Apaci, Vidradhi, etc., leprosy, dropsy, heart-disease, headache, worms, eye and ear diseases, poison, rheumatism, madness and epilepsy are some of the outstanding subjects mentioned in the Atharva-veda.

Even a cursory perusal of it is enough to conclude that a considerable knowledge of psycho-somatic medicine and a practical knowledge of human anatomy and surgical skill, obtained already among the Vedic Āryans. It is from such beginnings and on such foundations that the later sages, researchers in the vital science of Āyurveda, eight branched and three propped, evolved a medical system complete with its framework of general principles of the science of the

human organism and of the five-elemental composition of drug and the human cell controlled by the triad of forces called "Tridhātu" (त्रिधातु).

Of this we shall have to speak later in this volume. Suffice it to know now that from this period of Vedic medicine, we enter upon the variegated scene of the Samhitā period or the period of systematic and scientific compilation. The story of Āyurveda as scientific medicine begins after this quaint age of the Vedas, when the mortals and the immortals mingled and interchanged their gifts, when gods, spirits and demons were everyday realities and when the Takṣas (तक्ष) dwelt in running brooks and waving tree-tops and the Gandharvas (गन्धर्व) haunted the valleys and dells of the mountains. In such circumstances of living, naturally enough, the priest and physician were one, and religion and sacred ritual were not far distinguishable from the healing art. At the end of this Vedic age must we place the great congress of sages described in the opening lines of the Caraka Samhitā, who gathered together to discover the way of healing and long life, faced with the undeniable reality of deadly disease and pestilence that snatched away the flower of humanity and made impossible the higher progress and evolution of life through meditation and thought. With that conference in the northern Himalayas, dawns the age of scientific medicine in India. The history of that medicine, the story of its beginning and unfoldment, we shall trace in broad outline in the following pages, with the limited resources at our disposal.

CHAPTER II

THE STORY OF AYURVEDA

The mists of time have rolled over the beginnings of most of the efforts of Man in the realms of thought and of humanistic arts and sciences. Medicine, the most vital aspect of life with its immense value for happiness and survival, is inevitably shrouded in mystery as to its beginnings, as much as life itself. The great pioneers of thought and practical investigations remain unknown to us and only their heirs and successors are remembered by us as the authors of this beneficent wisdom. As Thomas Browne has queried, "who knows

whether the best of men be known or whether there be not more remarkable persons forgot than any that stands remembered in the known account of time?" George Eliot's words add support to this feeling that the greatest benefactors of the world are hidden from the ken of history. For the growing good of the world is partly dependent on unhistoric acts and that things are not so ill with you and me as might have been, is half owing to the number who lived faithfully a hidden life and rest in unvisited tombs. The greatest of our inventors and discoverers remain unsung and unnamed. For who knows the first maker of the wheel? Or as Cardinal Newman asks, "Who was the first cultivator of the corn? Who first tamed and domesticated the animals whose strength we use and whom we make our food? or who first discovered the medicinal herb which from the earliest times have been our resource against diseases? If it was mortal man who thus looked through the vegetable and animal worlds, and discriminated between the useful and the worthless, his name is unknown to the millions whom he has thus benefited".

Citing the above posers, Edward Berdoe in his 'Popular History of Medicine' observes, "Cardinal Newman has framed his question so far as the healing art is concerned, in a manner to which it is impossible to make a satisfactory answer. No one man first discovered the medicinal herbs. Probably the discovery of all the virtues of a single one of them was not the work of any individual. No one man looked through the vegetable and animal worlds and discriminated between the useful and the worthless. All this has been the work of ages and is the outcome of the experience of thousands of investigators. The medical arts have played so important a part in the development of our civilization that they constitute a branch of study second to none in utility and interest to those who would know something of the work of the world's benefactors".

The foregoing lines are enough to show that medicine can never be traced to definite human origins. This, perhaps, has led the great compilers of the medical tradition in India, rightly to assign medicine to divine origin. Beyond a certain degree of progress and

evolution, all thought is essentially revealed, for it emerges from the domain of the sub-conscious or super-conscious. Hence all knowledge is either inherent in and coeval with life or must be ascribed to super-human benefaction. The compilers of Āyurveda have therefore rightly held that the healing science is without beginning and the first promulgation of the science was by the gods and the best among mortals besought the gods and obtained and treasured the beneficial lore.

Thus with the history of medicine being a terra incognita to the general public and all but the untravelled region to the majority of even medical men, a comprehensive view of the evolution of medicine has yet to be written. For the historians of medicine in the west have not recognized fully the part played by India in the evolution of the medical science. We hope, with the full unfoldment of the history of Indian medicine, its due place in the world's history of medicine will be recognized. It is, therefore, our desire to attempt as far as possible to make a comprehensive survey of the development of Āyurveda from its prehistoric beginnings. It would therefore be of interest and advantage to trace the origin of medicine in general and of its origin in India in particular.

Medicine is as old as the instinctive avoidance of pain and since this repugnance to pain is an innate characteristic of life, it may be said that medicine is co-eval with life itself. Thus the medical historian, if he is to begin from the beginning, must needs go back to the very origins of life. But, obviously, so vast a theme is beyond the scope of the written word and indeed of the human intellect; and we can only exclaim with the ṛṣi Dirghatamas (दीर्घतमः) of the Rg-veda:

को वदसी प्रथमं जायमान-

मस्यन्वन्तं यदस्य विमर्ति ।

भूम्या असुरसंजाता क रिवत्

को विद्वांसमुपगतं प्रष्टुमेतत् ॥ R. V. I, 164, 14

को अद्वा वेद क इदं प्र बोवाकुत आजाता कुत इयं विसृष्टिः ।

अवर्षिदेवा अस्य विसर्जनेनाह को वेद यत आवभूव ॥

R. V. X, 11, 129/6

"Who beheld life, when it first arose?—life, that formless in itself, fills all forms.

From earth are fashioned blood and breath but whence the spirit that informs these?

Who has gone to the ultimate Knower of all things to put the question?

Who verily knows and who can here declare it, whence it was born and whence comes this creation? The Gods are later than this world's production. Who knows then whence it first came into being?"

Modern science which has sifted the atom in the universe and drawn its dragnet through immensities of siderial space is no wiser when it comes to the primal birth-mystery of life. The only difference—and it is a vital difference—is that, where the ancient seer saw in the emergence of life the fulfilment of a divine plan, the man of science is aware of an accident—merely—an accident so irrelevant in the cosmic context of its occurrence, that it can have no bearing on the scheme of things. To the modern scientist, then, no less than to the Vedic seer the first appearance of life and intelligence upon this planet remain the twin mysteries of creation.

Ayurveda which is concerned with both these mysteries is inclined to view them as having had no beginning in time and thus the question of when and how life and intelligence came into being, is discountenanced. Says Ātreya,

न हि नाभूत् कदाचिदायुषः सन्तानो बुद्धिसन्तानो वा ।

च. सू. ३०, २९

"There was no time when either the stream of life, or the stream of intelligence did not flow."

He then goes on to argue that as life has thus existed throughout all time and has always been aware of itself, it follows that Ayurveda which is but the tradition embodying this knowledge, has enjoyed an antiquity as immense as life itself.

The knowledge of healing therefore, has come down as an eternal tradition but an eternal tradition does not mean an immutable tradition. To Ātreya who takes the dynamic view of reality, the whole world is being reconstituted every moment. Knowledge is no exception and we have already noticed he refers to it as a "Stream" (बुद्धिसन्तान).

Thus, the continuity of tradition which Āyurveda has enjoyed is the continuity of growth not of mere survival. There is nothing in it of the "closed dogma revealed once for all to the saints" and admitting of no further modification. On the contrary Ātreya explicitly declares that Āyurveda has no limits (अपर) and that it is capable of indefinite expansion.

(I) सोऽनन्तपारं त्रिस्कन्धमायुर्वेदम् । च. सू. १, २५

(II) न चैव ह्यस्ति सुतरमायुर्वेदस्य पारम् । च. वि. ८, १४

He exhorts the student to be diligent in the acquisition of knowledge from whatever source available, since to the intelligent man the whole world is his teacher.

It is impossible as already mentioned to trace this continuity of medical tradition to its source. Reason and revelation no less than sorcery and superstition have contributed to its flow, which taking its rise from what mysterious well-springs we know not, has run parallel to the very stream of life. If it carried the silt of age-old superstitions, is it not also luminous with the light of the spirit?

Whether we believe with the ancients that medicine has descended from heaven, being a gift of the gods, or with the moderns that it has slithered up its way from the abysmal ooze of superstition and only now stands blinking in the sun, depends on our view of the origin and destiny of human life. Certain it is that it has shared the same cradle as life and is destined to the same immortal end. The Caraka Samhitā in common with the other ancient works recalls the tradition of the heavenly descent of medicine. Since it maintains that the science of life has coexisted with life this can only mean that in his pursuit of healing, man has received heavenly guidance from time

to time. One such occasion was the bestowal of Āyurveda by Indra, the chief of the gods, on Bharadvāja who had been deputed to bring it down to earth by the assembly of sages who met on the auspicious slopes of the Himālayas. This constitutes the beginning of the historical era of medicine. The circumstances attending this bringing down of the Āyurveda to earth by Bharadvāja as related in the introductory part of the Caraka Saṃhitā are worth recalling. It is said that when diseases first seriously assailed the lives of righteous people, the merciful sages taking pity on them met together on the auspicious slopes of the Himālayas to find out a way to overcome these impediments in their pursuit of the good life. The book mentions several of these sages by name and it would seem that this first historic assembly was representative of the wise men not only of India but of the greater India of that day and of the neighbouring countries. The assembled sages after much deliberation decided that help could come only from Indra, the king of the immortals, who had received the science of life from the divine Aświns. But who was there so enterprising, determined and ready enough to seek out the king of the immortals in his celestial court and obtain from him the science of life? There was an uneasy silence when this challenge went round and it was sage Bharadvāja known for his mighty austerities, that at last, breaking the spell, offered to go on the great quest.

How he meets the king of the celestials in his blazing court and having received from him the coveted lore of life, returns to the waiting sages, makes picturesque reading in the Caraka Saṃhitā. The science of life or Āyurveda thus enters on its earthly career and to sage Bharadvāja goes the credit of first promulgating it on earth. But 'first' here means as already pointed out, first in that age or epoch, for Caraka is emphatic on the point that the science of life is beginningless and has existed for all time. When we read the full story of this descent of Āyurveda to the earth as described in Caraka, the following facts are easily seen to characterise the historical truth regarding the systematic emergence of the medical science even in that far off day of antiquity in our history. And one is not surprised very much, when one remembers

that the spirit of that age was one of dedication to logic, the very foundation of science.

1. In that age, there took place a great conference of learned sages of India and of the neighbouring lands in order to find out a solution for the serious problem of disease which had assailed humanity then.

2. On finding that the necessary knowledge for combating the situation could be had from a far away land, they planned to depute a worthy member to acquire the much-needed wisdom.

3. Bharadwāja who stood up offering to undergo the tribulation of travelling far and acquiring the science was chosen. He returned and described it before the selected gathering of the sages. Though they were satisfied with the great message of hope and relief, being practical men, they first put it to the test by actual experimentation on themselves as well as on others. When they were assured of the practical efficacy of the science they accepted it as a system.

4. Then, they invited six outstanding scholars to classify and compile all the data pertaining to drugs and disease collected in various parts of the country and to embody them methodically and systematically in one complete treatise. When these six compilations were ready they were placed before a committee of select judges. They decided that Agniveśa's compilation was the best of them. They declared it before the world as the authoritative text of the medical science.

5. This is the first historical record, perhaps in the whole world, of systematising the medical knowledge—knowledge that had come down, till then, as a living tradition traced either from a divine origin or from the findings of the deep thought and meditation of sages or from the instinct, experiment and experience of generations of humanity.

This in brief is the story of Āyurveda in its transition from its legendary to its historical epoch and we shall content ourselves now in facing its mundane history as it passed from master to pupil and from the learned men of each age to their successors.

History allows of being evolved either on chronological or ideological or biographical lines. As for chronology, ancient Indian history of which Ayurveda is a part, does not afford much scope. But ideologically Ayurveda, following the lines of the general concepts of life, may be classified and described in its several stages of development in the light of metaphysical concepts of matter and life. But the last method viz., biography seems best suited for our present purpose.

It has been rightly said that history is the biography of outstanding individuals in each age and this is even more true with the history of medicine. Though the men living in each age are to be counted in millions, it is only given to a handful of men to play vital roles in the drama of life and provide food for the historian. Even so, in medicine, the lives and activities of outstanding men like Bharadwāja, Ātreya, Caraka Suśruta and Vāgbhaṭa and others in India; as of Pythagoras, Hippocrates, Aristotle, Galen, and a few others in Greece and Rome, constitute the history of ancient medicine in India and in the West respectively. In all, ancient history, whether of medicine or of the arts or of political life, the multitude remain passive spectators, with a few important and dynamic individuals holding the reins of the chariot of national life. Where popular institutions and life have not developed into active and self conscious functioning, the biographical method of history is the only true method to adopt and we shall proceed now to discuss and ascertain with as great a degree of certainty as possible, the lives and accomplishments of the leaders of medical thought ever since the science descended to the earth and began its terrestrial career as a rational system of healing for the protection and prolongation of life. For Caraka, this great science is a positive one intended for attaining long life.

दीर्घं जितमस्विच्छन् भरद्वाज उपागमत् ।

इन्द्रमुत्तपा बुद्धौ शरण्यममरेश्वरम् ॥ ३ ॥ व. सु. १

“Bharadwāja, the mighty ascetic, in search of the science of longevity approached Indra, having deemed him, the lord of the immortals, worthy of suit.”

Viewing the career of Āyurveda as a terrestrial science according to the Caraka Saṃhitā, Bharadvāja is certainly the father of medicine in Āyurveda. He is the Indian Prometheus that brought the fire from the gods and bestowed it on mankind. He is said to have brought the sunfire to the earth. At any rate the fire of the healing science that bestows the warmth of good health, happiness and long life on man is certainly the gift to mankind he brought from the king of the gods. Our history, naturally enough, begins with the inquiry into the nature and times of this greatest among sages.

CHAPTER III

BHARADWAJA

The prime source of all knowledge to the Indo-Āryans was the Veda and both legend and history must ultimately be traced to Vedic origins. The 'Science of Life' and the gods and sages that have propagated and enriched it, find mention in that eternal body of knowledge, the Vedas. The R̥gveda and the Atharvaveda are variously claimed as the source, or the original tree of which Āyurveda is a branch. It is thus called an Upa-veda (उपावेद) of the Atharva-veda by most and of the R̥gveda by some.

Though the Vedas are the eternal source of knowledge, they are given out at the beginning of each cycle of creation by the creator Brahmā (ब्रह्मा) and are promulgated by the foremost of his creatures for the guidance of the world. Thus, Brahmā, according to the Mundakopaniṣad (मुण्डकोपनिषद्) which belongs to the Atharvaveda, narrates the descents of the Brahma-vidyā (ब्रह्मविद्या) from Brahmā. Brahmā taught it to his eldest son Atharva. Atharva gave it to Aṅgīr and he to Satyavāha, a descendant of Bharadvāja. Through him it came down through generations to the world. What applies to this Brahma-vidyā applies to the whole of the Atharva-veda. This Atharva-veda is also called the Brahma-veda, the Veda par excellence. At the time of the sacrifice, the R̥gveda is represented and sung by the Hotā (होता), the Yajurveda by the Adhvaryu (अध्वर्यू), the Sāma-veda by the Udgātā (उद्गाता) and

the Atharva-veda by Brahman i. e. the one that represents the creator. Thus the place of honor is accorded to this Veda. The Gopatha Brāhmaṇa (गोपथब्राह्मण) says that while all the three Vedas form one wing of the bird of sacrifice, the Atharva-veda, by itself, forms the other wing.

त्रिविधैर्देवैश्च स्यान्मन्तरः पक्षः संनिवृत्तः । मन्त्रैश्च ब्रह्मा यज्ञस्यान्तरं पक्षं संन्योति ।
गो. ब्रा. ३. २.

We thus see that this Atharva-veda was held in high esteem and its promulgators were naturally regarded as the leaders of thought and practical wisdom.

This Atharva-veda is both religious and secular in its range of subjects and scope of practice. Not only was it sung and represented at the performance of the sacrifice which was the nucleus of Vedic religion and worship, but its coteries were the ones considered duly qualified to be the preceptors and advisers to kings and entitled to perform the auspicious ceremonies for happiness and health (स्वास्तिकपौष्टिक) and of coronation of kings.

पौरोहित्ये शास्तिकपौष्टिकानि राज्ञां अथर्ववेदेन कारयेद्ब्रह्मत्वं च । इति भट्टाचार्यैरप्युक्तम् ।

शान्तिपुष्टयभिचारार्था एकब्रह्मर्षिगोश्रवाः ॥

क्रियन्तेऽथर्ववेदेन मन्त्रेवात्मनोयोगाः ॥ इति नीतिशास्त्रेऽपि ।

वयसां च दण्डनीसां च कुशलः स्यात्पुरोहितः ।

अथर्वविहितं कर्म कुर्याच्छास्तिकपौष्टिकम् ॥ इति मत्स्यपुराणे ।

पुरोहितं तथाथर्वमन्त्रब्राह्मणपारम् । इति मार्कण्डेयपुराणे ।

अभिविक्तोऽथर्वमन्त्रैर्महो भुङ्क्ते ससागरम् । इति अथर्वपरिशिष्टे ।

Thus we see that the Atharva-veda containing as it does, both spiritual and worldly lore, was patronised both by sages and kings. Its promulgators were naturally the leaders of society and the originators of the great sciences and arts that the Atharva-veda contained. This Atharvāṅgīrasa lineage is the one from which has sprung the great sage in question, Bharadvāja, and no wonder that in the Atharva-veda his name and stature stand out conspicuously; and according to the Caraka Saṁhitā, he is the bringer of the medical science

from the king of the gods and the first teacher of Āyurveda on earth, of whom Ātreya and others are the great disciples.

Agni, Vāyu and Sūrya are the recipients of the R̥k, Yajus and Sāman respectively and similarly Atharvā is the recipient of the Atharav-veda. Bharadvāja belonging to his line is naturally accorded the great place as the earthly promulgator of its important branches of medicine and archery.

Now, as regards the evidence we have from the three foremost Samhitās of Āyurveda about its origin and earthly descent, there is unanimity upto a certain extent i. e. with reference to the celestial part of its devolution.

महाय हि यथाशोकमायुर्वेदं प्रजापतिः ।

जग्राह निखिलेनादावश्विनौ तु पुनस्ततः ॥ ४ ॥

अश्विभ्यां भगवाच्छक्रः प्रतिपेदे ह केवलम् ।

ऋषिप्रोक्तो भरद्वाजस्तस्माच्छक्रमुपागमत् ॥ ५ ॥ च सू. १.

“Dakṣa Prajapati, the progenitor, first obtained the science of life in its entirety as promulgated by Brahmā, the great one i. e. the Creator and from him in turn, the Aśvin twins obtained it; from the Aśvin twins the god Indra acquired. Therefore Bharadvāja bidden by the sages approached Indra (Śakra)”.

Thus according to them all, Brahmā taught the science to Dakṣa, the progenitor, and he imparted it to the twin gods known as the Aśvins. From them Indra, the lord of the immortals, learnt it. It is from Indra that mortal protagonists acquired it, and according to the Caraka Samhitā, the first mortal that received the science was Bharadvāja, who repaired to the court of Indra delegated by the congress of Ṛṣis to appeal to the king of the gods to impart the science for the redemption of suffering mankind below. Graciously enough, Indra taught the whole of the science to Bharadvāja, from whom Ātreya and other great sages learnt it and passed on to their disciples. The prime object of the science of life is to lengthen the span of earthly existence and Bharadvāja, the first mortal knower of this science, is credited to have achieved this end.

तेनायुषिणं लेखे भग्नायः सुखान्वितम् । ॥ २३ ॥

च. सू. १

"Bharadwāja thereby acquired unmeasured life endowed with happiness"; for he is known to have lived through three lives i. e. three generations of contemporary humanity. This, as we have already said, is the version of the Caraka Samhitā of the beginning of Āyurveda on earth. But according to the Suśruta and Kāśyapa Samhitās which are more or less contemporaneous with Caraka Samhitā or Agniveśa-tantra as it is also called, the original teachers of these treatises namely Dhanvantari and Kāśyapa claim to have received the science direct from Indra, on a par with Bharadwāja.

The following table gives the manner of descent of Āyurveda and the succession of teachers and disciples according to each of these three important treatises, each representing predominantly a branch of medicine. Thus the Ātreya school is primarily one of medicine, the Suśruta school of Surgery and the Kāśyapa school of Pediatrics and obstetrics.

Brahmā (ब्रह्मा)		
Dakṣa (दक्षः)		
Aświns (अश्विनौ)		
Indra (इन्द्रः)		
(According to the version in Suśrūtā Samhitā) (सुश्रुतसंहितालेखात्)	(According to the version in Kāśyapa Samhitā) (कश्यपसंहिता लेखात्)	(According to the version in Caraka Samhitā) (चरकसंहितालेखात्)
Dhanvantari (धन्वन्तरिः)	Kāśyapa, Vasiṣṭha, Atri & Bhṛgu (रघु खल्लि- विभृगवः)	Bharadwāja (भरद्वाजः)
or	Their sons and disciples (पुत्रा पुत्राः शिष्याश्च)	
Divodāsa (दिवोदासः)		Ātreya Punarvasu (अत्रेय- पुनर्वसुः)
Suśrūta, Aupadhenaya, Vaitarana, Attribhira, Paṅskalāvata, Karavirya, Gopūrarakṣita, Bhoja and others	(सुश्रुतौ धन्वन्तर- वैतरणौ रघु- खल्लिवत- करवीर्यगोपुररक्षित- भोजादयः)	Agniveśa, Bhela, Jatū- karṇa, Paraśara, Hā- rita, Kṣārapāni and others (अग्निवेश- भेल-जतु- कर्ण-पराशर- हारीत- क्षरपाणि- अरवाणयः)

In this connection it is necessary to refer to another part of the Caraka Saṃhitā where a different account of the descent of Āyurveda, particularly of Rasāyana, is given. In the section on Rasāyana, the following narrative occurs.

हिमवन्तं अमराधिपतिपुत्रं जम्बुद्वीपजिरोऽश्विस्मिन्कश्यपागस्त्यपुलस्त्यवामदेवासि तगौतमप्रभृतयो
महर्षयः ॥ ३ ॥ तन्निन्दः सहस्रहजस्रगुरुतवीन् ॥ ४ ॥ (च. चि. १/४-४)

यद्यपि च ऋषयो भरद्वाजद्वारा इन्द्रादधिगतायुर्वेदाः तथाऽपि ग्राम्यवासकृतमनोरथान्या न तथा
सङ्ग्रहे वर्तन्ते इति शङ्क्यं पुनरिन्द्रस्तानुपदिशति (चक्रपाणिटीका).

Which means that Bhṛgu, Aṅgirā and other sages approached Indra in the Himālayan region, desiring to find a remedy for the ills born of dwelling in towns and villages. They receive the desired knowledge from Indra. There is no mention of Bharadvāja in this context as receiving Āyurveda from Indra; but there is the name of Atri among the galaxy of sages. The learned commentator Cakrapāṇi comes to the reader's rescue and explains that this refers to a later occasion than the one described in the opening chapter of the book and that in the meanwhile the science of healing had fallen into neglect and that the sages mentioned above approached Indra again for instruction. The explanation sounds quite plausible considering the fact that no two obviously conflicting versions could have been embodied in the same text by its authors or compilers and subsequent redactors; and a supposition like the one suggested by the learned commentator seems quite justifiable and to have been intended by the authors. The latter reference is evidently limited only to the science of Rasāyana.

As regards the evidence of the other two Saṃhitās referred to, we shall first examine the Suśruta Saṃhitā. There is no mention of Bharadvāja having received the science from Indra or having imparted it to Dhanvantari, the king of Kāśī. Dhanvantari claims to have received it from Indra directly, as may be seen from the table given before. Yet in contradiction to what we see in the Suśruta Saṃhitā itself, we find from the Taittiriya Brāhmaṇa and the Mahabharata that Bharadvāja was the priest (Purohita पुरोहित) of three generations

of the Kings of Kāśī i. e. Dhanvantari, (धन्वन्तरि), Sudāsa (सुदास) and Prataṛdāna (प्रतरदन). He is thus said to have lived through three lives. Divodāsa must have owed his knowledge to his preceptor and priest Bharadwāja. The Harivaṃśa (हर्षिवंश) describes Bharadwāja as the teacher of the medical science to Dhanvantari.

तस्य गेहे समुत्पन्नो देवो धन्वन्तरिस्तदा ।

काशिराजो महाराज सर्वरोगप्रणाशनः ॥ २६ ॥

आयुर्वेदं भरद्वाजप्रप्रेक्ष्य भिषजां क्रियाम् ।

तमध्वजा पुनर्वस्य शिष्येभ्यः प्रत्यपादयत् ॥ २७ ॥

धन्वन्तरेस्तु तनयः केलुमानिति विश्रुतः ।

ह. वं. २९.

Evidently, as Divodāsa was regarded as the earthly incarnation of God Dhanvantari, the original God of medicine, he claims to have received the science directly from Indra, the king of the Gods. Thus alone can we explain the absence of any mention, in the Suśruta Saṃhitā, of Bharadwāja as the preceptor of Dhanvantari or Divodāsa. The compiler of each treatise, perhaps, desired to make the particular preceptor in question supreme above all others. We see this tendency in other treatises too. In the Kāśyapa Saṃhitā, Kāśyapa and not Bharadwāja is the recipient of the Science from Indra.

Again, in the Hārīta Saṃhitā—Hārīta is a disciple of Ātreya along with Agniveśa, Bhela and others—we have a confirmation of the story of Bharadwāja as the teacher of Ātreya and other sages.

“ शकादहमधीतवान् ” इत्यादिना

“ मत्तः पुनरवेक्ष्येयस्त्रिसूत्रं त्रिप्रयोजनम् ।

अत्रात्रेयादिपर्यन्ता विदुः सप्त सहस्रयः ॥

(हारीतसंहिता)

Curiously enough, Vāgbhaṭa, who draws from all the Saṃhitās extant at his time, portrays Punarvasu Ātreya as approaching Indra as leader of other sages among whom Bharadwāja is also one,

and as learning the Science of life from him. He is not indebted to Bharadwāja for his acquisition of the science.

ब्रह्मा स्मृत्वाऽऽयुषो वेदं प्रजापतिराजिग्रहत् ।

सेऽश्विनौ तौ सहस्राक्षं रोऽविपुत्रारिकान् शुनीन् ॥

अ. ह. सू. अ. १

धर्मार्थकायसोक्षाणां वृत्तकारिभिरऽमयैः ।

नेपु पीड्यमानेषु पुरस्कृत्य पुनर्वसुम् ॥ ४ ॥

धन्वन्तरिभरद्वाजयिमिकाशयत्कश्यपाः ।

सहस्रयो महात्मानस्तथा तन्वायभाक्षः ॥ ५ ॥

शतक्रतुमुपाजग्मुः इरभ्यभरेश्वरम् ।

तान्दधेव सहस्राक्षो विजगाम यथागमम् ॥ ६ ॥

अ. सं. सू. १

Perhaps it is these and such other conflicting narratives that have made some scholars believe Ātreya to be identical with Bharadwāja. But the learned Cakrapāṇi is emphatic on the different individualities of these two sages and is definitely of the opinion that Bharadwāja is the teacher of Ātreya.

अत्र केचिद् भरद्वाजात्रेययोरैक्यं मन्यन्ते, तत्र, भरद्वाजसंज्ञया आत्रेयस्य
कचिरपि तन्त्रप्रदेशोऽकीर्तितान्; (चक्रपाणिः)

A much later writer on medicine, Bhāvamīśra, of the sixteenth century, has three differing versions of the story of Āyurveda. Evidently he contents himself by stating the actual versions then current in books and among the scholars of the science. He firstly narrates the story as told by Vāgbhaṭa wherein Ātreya, as the leader of a group of sages, receives his instruction from Indra.

नासत्याभ्यानधीत्यैव आयुर्वेदं शतक्रतुः ।

अध्यापयानास ह्युवात्रेयप्रमुखान् सुनीन् ॥ भा. प्र. पू. १

In the second story, he depicts Ātreya as approaching Indra, by himself, out of compassion for suffering humanity; and having learnt the science from Indra, Ātreya writes a treatise on Āyurveda and instructs his disciples Agniveśa, Bhela and others in it.

चितयासास भगवानात्रेयो मुनिपुङ्गवः ।

किं करं हि कं गच्छामि वयं लोकं निराशयाः ॥

*

*

*

आयुर्वेदे पठिष्मसि नैरुज्याय शरीरिणाम् ।
इति निश्चित्य गतमानान्नेथैस्त्रिदशालयम् ॥

* * *

आयुर्वेदोपदेशं मे कुरु इत्यथतो नृणाम् ।
तथैवमुक्त्वा सः सखाहोऽध्यापयामास तं मुनिम् ॥

भा. प्र. पृ. १

According to the third story, once it happened that many sages met together on the slopes of the Himālayas. The first to arrive was the best among sages, Bharadwāja. Then all the sages that congregated, unanimously chose and brought Bharadwāja to repair to Indra and bring down the Āyurveda.

ततोऽपि प्रसूयान् कथनं निश्चित्यस्योऽवशिष्टैः ।
यं श्रेयसिमाश्रयः संसृतिं पान्द्रासं मुनिं तेष्वनुव्रत ॥
तं योग्यो भवत् । सहवचनं यावत्तु लब्धं कृत्वा-
दायुर्वेदमधीतं यं गदध्वान्मुक्त्वा भक्षसो वयम् ।
इत्थं स मुनिर्योग्यैः प्रार्थितो दिव्यान्वितैः ।
भारद्वाजो मुनिश्रेष्ठो जनाम दिवशाख्यम् ॥
तमेन्द्रभक्षसं तस्यैव सुरार्दिगणसंघमम् ।
दृष्ट्वा च दृष्टवन्तारं वीर्यमानसिमानलम् ॥

भा. प्र. पृ. १.

He did so and the other sages studied the treatise written by him and acquired long life and health. This story is more in accordance with the one given in the Caraka Samhitā except for the feature which makes Bharadwāja offer himself voluntarily to be their deputy before Indra in the latter work. That the other sages learnt the science from him is common to both the versions. His teaching was imparted systematically, laying out the foundations of logical concepts of Sāmānya, Viśeṣa and Samavāya, from which the theory of drug and action as evolved leading to the general principles of the science of medicine. Both in Bhāvaprakāśa and Caraka, these logical concepts are specifically mentioned as the basic knowledge that Bharadwāja taught the other sages for learning the science of medicine. It is therefore natural to surmise that Bharadwāja should have been famous as a teacher of logic. We find one Udyota-kara,

the author of Nyāyavārttika referring to Bharadwāja as the author of Nyāya.

From the foregoing it must be evident that despite conflicting narratives, Āyurveda owes its inception to Bharadwāja. The strongest point in favour of such a view is his line of descent from Atharvā and Āngiras, the receivers and seers of the Atharva-veda, and Āyurveda as a part of the Atharva-veda accords leadership in the science to Bharadwāja, a luminous sage of the Atharvavedic line of descent.

Besides, Bharadwāja is a name held in great veneration even in the R̥gveda. He is the composer of the Br̥hat which is the best of the Sāma melodies. In a hymn in the R̥gveda (X. 181) it is sung that while Vasiṣṭha composed the Rathantara Melody it was Bharadwāja who was the author of the Br̥hat, these being the twin luminous wings of the fire-bird of sacrifice. It is also said that Bharadwāja was among the first to discover 'the highway leading to the gods.' The hymn concludes saying, rather mysteriously, that it was 'these sages (among whom Bharadwāja is one) that brought down the Gharma' (गर्म) the heat, from the sun.

अविदन्ते अतिहितं यदासीत्तस्य धाम परमं गुहा यत् ।

वातुर्बुतानात्सवितुश्च विष्णोर्भरद्वाजो बृहदा यक्ते अग्नेः ॥ २ ॥

ते अविदन्मनसा वीध्याना यजुः पक्वन् प्रथमं देवयामं ।

वातुर्बुतानात्सवितुश्च विष्णो रसूर्यादभरन्वर्ममेते ॥ ३ ॥

ऋ. म. १०. सू. १८१

"They found with mental eyes the earliest Yajus, a pathway to the gods that had descended from radiant Dhātār, Savitar and Viṣṇu. From Sūrya did these sages bring the Gharma." (Griffiths translation of R̥gveda)

In the Mahābhārata, Bharadwāja is said to be a sage settled near Haradwar on the banks of the Ganges, while in the Rāmāyaṇa he has his hermitage at Prayāg where he receives Rāma and Sītā.

According to both the *Harivamśa* (हरिवंश) and the *Bhāgawata* (भागवत), Bharadwāja became the adopted son of Paurva (पौर्व), son of Bharata. In the story it is said that as the king was not satisfied with the qualities of the children his wife bore him, he was very much grieved and the Maruts commended to him this son of Bṛhaspati as most worthy of being adopted by him for a successor.

The story of his birth in this connection is worth narrating. According to the *Viṣṇu Purāṇa* and the *Mahābhārata*, he is the son of Mamata (ममता) by Bṛhaspati. When Utathya's (उत्थय) wife Mamatā was big with child, Bṛhaspati the husband's younger brother cohabited with Mamatā. The fetus, who later was the great sage Dīrghatamas (दीर्घतमस्) objected to the uncle's attempt at further impregnation and kicked out the new fetus with his feet. In consequence, Bṛhaspati caused the original fetus to become blind as Dīrghatamas became [since, as his name indicates. Though thrown out, Bṛhaspati's offspring grew into the child that was Bharadwāja later. "Rear this child of double parentage (द्वाजं भर),"] with these words Bṛhaspati offered the child to the mother.

अन्तर्विन्यां भ्रातृपत्न्यां मैथुनाय बृहस्पतिः ।

प्रवृत्तो वारितो गर्भं शप्त्रा वीर्यमवासृजत् ॥३६॥

तं त्यक्तकामो ममतां भर्तृत्यागविशङ्किताम् ।

नाम निर्वचनं तस्य श्लोकमेनं सुरा जगुः ॥३७॥

गृहे भरद्वाजमिमं भर द्वाजं बृहस्पते ।

यातौ यदुक्त्वा दितरौ भरद्वाजस्ततस्त्वयम् ॥३८॥

भाग. स्कंध. ९ अ. २०

Thus the strange tale of an instance of superfetation hangs about this great personage of ancient times, one of the greatest leaders of men at the very dawn of Āryan history in India. Prometheus-like in stature and benevolence, wise as behoves the son of Bṛhaspati, the teacher of the gods, he strode the earth like a prophet, bringing the fire from the sun, the healing wisdom from the king of the immortals, and opened up the pathway leading to heaven, which may mean the "Brahma-vidyā" or the institution of sacrifice that opens up the path leading to the Gods. Prophet, sage and prince, this dynamic leader was the contemporary of three generations of humanity, counsellor and teacher to the kings of Kāśī,

According to both the *Harivamśa* (हरिवंश) and the *Bhāgawata* (भागवत), Bharadwāja became the adopted son of Paurva (पौर्व), son of Bharata. In the story it is said that as the king was not satisfied with the qualities of the children his wife bore him, he was very much grieved and the Maruts commended to him this son of Bṛhaspati as most worthy of being adopted by him for a successor.

The story of his birth in this connection is worth narrating. According to the *Viṣṇu Purāṇa* and the *Mahābhārata*, he is the son of Mamata (ममता) by Bṛhaspati. When Utathya's (उत्थय) wife Mamatā was big with child, Bṛhaspati the husband's younger brother cohabited with Mamatā. The fetus, who later was the great sage Dīrghatamas (दीर्घतमस्) objected to the uncle's attempt at further impregnation and kicked out the new fetus with his feet. In consequence, Bṛhaspati caused the original fetus to become blind as Dīrghatamas became [since, as his name indicates. Though thrown out, Bṛhaspati's offspring grew into the child that was Bharadwāja later. "Rear this child of double parentage (द्वाजं भर),"] with these words Bṛhaspati offered the child to the mother.

अन्तर्विन्यां भ्रातृपत्न्यां मैथुनाय बृहस्पतिः ।

प्रवृत्तो वारितो गर्भं शप्त्रा वीर्यमवासृजत् ॥३६॥

तं त्यक्तकामो ममतां भर्तुः शोकाविशङ्किताम् ।

नाम निर्वचनं तस्य श्लोकमेनं सुरा जगुः ॥३७॥

गृहे भरद्वाजमिमं भर द्वाजं बृहस्पते ।

यातौ यदुक्त्वा दितरौ भरद्वाजस्ततस्त्वयम् ॥३८॥

भाग. स्कंध. ९ अ. ३०

Thus the strange tale of an instance of superfetation hangs about this great personage of ancient times, one of the greatest leaders of men at the very dawn of Āryan history in India. Prometheus-like in stature and benevolence, wise as behoves the son of Bṛhaspati, the teacher of the gods, he strode the earth like a prophet, bringing the fire from the sun, the healing wisdom from the king of the immortals, and opened up the pathway leading to heaven, which may mean the "Brahma-vidyā" or the institution of sacrifice that opens up the path leading to the Gods. Prophet, sage and prince, this dynamic leader was the contemporary of three generations of humanity, counsellor and teacher to the kings of Kāśī,

revered leader and compeer of the greatest of sages, he might also be one of the seven original sages that exist from the beginning of each cycle or Manvantara (मन्वन्तर). Oshrahaṇṇi, the commentator is of the view that he is only a descendant of the original sage of that name.

With this great personage, half legendary and half historical, half divine and half human, striding the snowy heights of the Himālayas in the early dawn of history, footing the path to the home of the king of the immortals, 'looking larger than human on these frozen hills', the history of Āyurveda begins. He remains for ever the bringer of the healing light, the father of the science of Medicine on Earth.

The Various Bharadwajas

"The first and the foremost famous vedic poet of this period was Bharadwāja Vājineya (वज्रिण बलिनेय). He was a contemporary of Divodāsa (दिवोदास), Prastota Sarajana (सराजना) and Abhyavartin Cayamāna (अभ्यवर्ति चयमान) and consequently of Daśaratha. His sons were Garga (गर्ग) and Pāyu (पयु). Rāma Daśarathi repaired to his hermitage on his way back from Lāṅka. He was the Purohita of Divodāsa, gave Pratardana (प्रतर्दना) Daivodasi (दैवोदासी) his kingdom and Kṣatrasri Pratardani (क्षत्रस्री प्रतर्दनी) was his Yajamāna. He was one of the Ṛṣis of the Vedic age, who prohibited the slaughter of cows in sacrifices simply out of gratitude to the bovine race which showers on mankind kindness in the form of milk. Bharadwāja loved the cows so very deeply that he did not hesitate to identify them with Indra, 'his deity.'"

The above is evidently the account of Bharadwāja that we have just studied in the foregoing pages as described by an orientalist. That Bharadwāja loved the cows and identified them with Indra is how we may understand if we take the word 'Go' (गो) to mean cow. 'Go' is primarily light or knowledge and the Veda which is the embodiment of it. Bharadwāja was a great 'Gaveśaka' (गवेशकः) meaning not simply a lover or promoter of the well being of the cow, but a seeker after light and knowledge. That he identified knowledge with Indra is easily understandable when we know that he received

Kumārasīrā Bharadwāja'.

He participates in the discussion on the actions of Vāta and again in the significant discussion on the number of tastes. He propounds that tastes are only five in number,

नष्टुवा वायं कुमारशिरा भरद्वाज उवाच—एवमेतद्यथा भगवानाह, एत एव वातगुणा भवन्ति
स त्वेऽं गुणैरेवंद्वैतवैभक्तैश्च कर्मभिरभ्यस्यमानैर्वायुः प्रकौपमापद्यते, समानगुणाभ्यासे हि धातूनां वृद्धिकारणमिति ॥

च. सू. १२-५

"Hearing this statement, Bharadwāja, the Kumārasīrā said, 'It is even as your honour has said; such, to be sure, are the characteristics of Vāta. It is by the repeated use of such like qualities, such like substances and actions of such like potencies that Vāta becomes excited. For, verily, the increasing factors of the body-elements is the repeated use of homologous things."

यः कुमारशिरा नाम भरद्वाजः स चानयः । च. सू. २६-४.

"The sinless Bharadwāja known as Kumārasīrā,"

पञ्च एषा इति कुमारशिरा भरद्वाजः । च. सू. २६-८.

"Bharadwāja known also as Kumārasīrā then said, 'There are five tastes;....'"

Thus we find a Bharadwāja Kumārasīrā, quite distinct from the Great Originator of the Science on earth and described in the beginning of the Caraka Samhitā.

There is another person by the name of Bharadwāja, who is a great scholar taking part in the learned discussions of the sages and propounding the theory of Nature or the innate quality of things as the cause of man as well as of his diseases.

भरद्वाजस्तु नेत्याह कर्ता इह हर्मणः ।

दृष्टं न चाकृतं कर्म यस्य स्यात् पुरुषः कलङ्कः ॥ २० ॥

भविष्येतिः स्वभावस्तु व्याधीनां पुरुषस्य च ।

खरश्चचलोष्णरवं तेजोर्न्तानां यवैव हि ॥ २१ ॥ च. सू. २५

नेति भरद्वाजः, किं कारणं-नहि माता न पिता नात्मा न सारथ्यं न पानाशनमक्षयजेद्योपयोगा
गर्भं जनयन्ति, न च परलोकादेत्य गर्भं सत्त्वगवक्रामति ॥ च. शा. ४ [१]

"To this the sage Bharadwāja said—'No. For the doer always precedes the deed. Nor have we any valid knowledge of action that has not been performed, whereof it may be said that an individual is the result. Nature alone is the cause, then, of both man and his disease just as roughness, fluidity, mobility and heat are respectively the nature of earth, water, air, and fire.'"

* + * *

"No ! said Bharadwāja to this. For what reason did he say so? Because neither mother nor father, neither the spirit nor concordance, nor yet the use of drinks or foods that are eaten, masticated or licked up, in fact, bring about the conception. Nor does a mind, coming from another world, enter into the embryo."

In the latter part of Śārīra-sthāna, Chapter III, a Bharadwāja asks the teacher Ātreya a number of questions. This Bharadwāja seems to be merely a student who goes on asking questions, and evidently a different person from the learned Bharadwāja of the earlier part of the chapter, who has authoritative views of his own.

भरद्वाज उवाच,

गर्भः कथमयं सन्धीयते । कस्मात् गर्भो मनुष्यविक्रमेण जायते । कस्मात् जडाश्च.....
पितृसदृशरूपा न भवन्ति । च. शा. ३, १५

"How is the embryo integrated? Why does the embryo emerge in the shape of man? Why are those, sprung of the idiote, blind.....unlike the parents?"

चक्रपाणिटीका-भरद्वाजश्चरेन इदं नात्रेयगुरुः उच्यते, किन्तु अन्य एव भरद्वाज इति, तेन तस्य संशयच्छेदनात्रेयेणोपपन्नम् एव ।

In the Kāśyapa Samhitā there is a reference to a Kṛṣṇa Bharadwāja (कृष्णभरद्वाज) who may be a son of Bharadwāja.

चत्वारो रोगा आगन्तुवातपित्तकफजा इति कृष्णो भारद्वाजः । का. सं. सू. २७. ३.

"There are four kinds of diseases: exogenous, those born

of Vāta, those born of Pitta and those born of Kapha; so says Kṛṣṇa Bhāradwāja'

It is necessary to mention, while yet on this subject, that there are a few works come down in the name of Bhāradwāja.

1. Bhāvaprakāśa (भवप्रकाश) ascribed to Bhār dwāja, a regular treatise on medicine from which the other sages studied and learnt the qualities and actions of substances.

2. There seems to have been current a book entitled Bhāradwājiyam (भारद्वजियम्) meaning the book on the system of Bhāradwāja.

3. Bheṇja-kalpa (भेनजकल्प) is another book ascribed to him dealing with the pharmaceuticals and treatment of fevers. A commentary of this work is also available.

There are a few recipes too bearing Bhāradwāja's name, being perhaps propounded by him.

The following recipes bear the name of Bhāradwāja: (Bṛhat Phalaghyta बृहत्फलगुह्यत नमः कष्टं त्रिभुवनं विविक्तं (उद्वेगः)) and (Phalaghyta फलगुह्य) एतन्मन्त्रं नमः त्रिभुवनं विविक्तं (आतुरादिभिः).

In conclusion, it is necessary to repeat that the great mass and variety of evidence that we have reviewed, leave no doubt regarding the existence and accomplishments of this great sage and father of medicine. There must have been lesser persons bearing his name who have played some part in the history of the cultural evolution of the Indo-Aryan people; but the proto-type, the Bhāradwāja that brought down the science of medicine and opened up the way to the court of Indra, is from all accounts, the real hero and originator of the Science of Medicine and of Life, known as Āyur-veda. No account of the evolution of Medicine in India can afford to ignore this haloed name, if it should be faithful to the inscribed chronicles of racial history. It is only after a full cognizance of his greatness and significance that we can pass on to consider the lives and achievements of other teachers and propagators of medicine, in the land of the Āryas.

CHAPTER IV

ATREYA

The great teacher of Kāya-cikitsita (कयचिकित्सित) or medicine is Kṛṣṇa Ātreya according to the Mahābhārata.

गार्ग्यं नारदो वेदं भारद्वाजं षडुग्रहम् ।

देवविचरिणं नारदः कृष्णदेवधिरिहिरात्म ॥ २१ ॥ महा-भा-प. अ. ३१०

The Caraka Saṃhitā, the greatest of the works on medicine purports to be the final embodiment of Ātreya's teaching. Every chapter opens with the words 'Thus spake the worshipful Ātreya (इति ह वैश्वदेवः नारदाचार्यः)'.
इति ह वैश्वदेवः नारदाचार्यः)

Agnīveśa and other disciples are greatly attached to him and hold him in supreme veneration. He is the first systematic teacher of the science of medicine after it was brought from Indra and imparted to the noble galaxy of sages by Bharadwāja.

The Caraka Saṃhitā does not say explicitly that Ātreya learnt the science from Bharadwāja, but it just mentions that Bharadwāja, having brought the sacred wisdom from Indra, imparted it to the sages Marīci and others, among whom Ātreya is one. We are then introduced to a situation wherein Ātreya, the compassionate one, taught this holy science of life to his disciples for the ultimate benefit of all creatures. (च. सू. ३. ३०).

Despite the absence of a specific mention of the transmission of the science from Bharadwāja to Ātreya, the fact implied is so transparent that the authors omitted the statement of the obvious. The verse opening with the word 'thus' (च. सू. १-३०) is meant to convey this fact viz, in the manner foregone i. e. the sages including Ātreya having learnt the science, then it so happened, that Ātreya began teaching medicine to his disciples. Cakrapāṇi, the commentator, is emphatic on this point and contradicts the conclusion of some identifying this Ātreya with Bharadwāja who learnt the Āyurveda from Indra. For the latter, mistake is made by some in view of the description in Caraka in the chapter on Rasāyana, where Atri is said to have received the

knowledge directly from Indra. That pertains only to Rasāyana and on a later occasion than the one described in the opening chapter and therefore does not apply to the question of the whole science of Āyurveda as it was taught by Indra to Bharadvāja and again by him to the sages of whom Ātreya is one.

In this connection it is interesting to note that Vāgbhata and Bhāvamīśra refer to Pitarvāsu or the son of Ari as approaching Indra at the head of a group of sages and learning the Science of medicine from him. (अ. सं. सू. १, ४.) (अ. ह. सू. १, ३.) (भा. प्र. अ. १.)

That this Ātreya is one of the great sages, expert in the sciences and spiritual knowledge, and one held in high esteem is evident from the prefixed title to his name 'Bhagawān' (भगवान्). This is a title that only the very greatest of sages of supreme spiritual attainment may hope to obtain. The qualifications or merits that entitle one to this honour are set forth thus.

“उत्तरसि प्रलयं कैव भूतनामागतिं गतिम् ।
वेत्ति विद्यामविद्यां च स वाच्यो भगवानिति ॥”

“He is to be known as 'Bhagawān' who is possessed of the knowledge of creation and dissolution of the world and of the birth and death of creatures as also of science both material and spiritual.”

Ātreya was thus among the elite of the sages, adept in all the sciences and mature in spiritual wisdom and a teacher specially of the science of medicine. Though versed in all the eight branches of the Science of Life, he devoted this treatise entirely to medicine and referred his disciples to other teachers and treatises when resort to surgical and other special procedures were in demand.

अत्र धान्वन्तरीयाणाम् वेदार्थः क्रियाविधौ ।

च. वि. ३, ४४

“This is the domain of the surgeons”, is a remark one meets with when there are indications for surgical remedies.

पराधिकारे तु न विस्तरोक्तिः

शस्त्रेति तेनात्र न नः प्रयासः ।

च. वि. २६, १३१

“We do not attempt to expatiate on them here, as that belongs to the province of specialists.”

Thus Atreya is a specialist in Medicine ('Kāya-Cikitsā') and specially therapeutics and a popular verse in vogue assigns excellence in each department of medicine to each one of the four expert teachers and writers on the medical science.

निदाने नाथवः श्रेष्ठः सूत्रस्थाने तु वाग्भटः ।
शारीरे सुश्रुतः प्रोक्तः चरकस्तु चिकित्सिते ॥

“Mādhava is unrivalled in diagnosis, Vāgbhāṭa in general principles of medicine, Suśruta in surgery and Caraka in therapeutics.”

Ātreya is also known as Punarvasu or Punarvasu Ātreya. In the Caraka Samhitā, the word Punarvasu is used as a synonym for Ātreya. The opening line of every chapter contains always the words “thus spake the worshipful Ātreya” and at the end of the chapter in the recapitulation of the subject of the chapter sometimes other synonyms like Punarvasu, the great sage, Cāndrabhāga or Kṛṣṇa Ātreya are used, thus making it clear that Bhagawan Ātreya was also known by other names of his.

तच्छ्रुत्वा काप्यवचो भगवान् पुनर्वसुरात्रेय उवाच ।
(च. सू. १२, १३)

यथाप्रश्नं भगवता व्याहृतं चान्द्रभार्गवा ।
(च. सू. अ. १३, १००)

त्रित्वेषाण्डौ समुद्दिष्टाः कृष्णात्रेयेण धीमता ।
(च. सू. अ. ११, ६५)

It is possible that the epithet Punarvasu (पुनर्वसु) may be significant of Ātreya being born during the dominance of the constellation of that name. Such method of nomenclature we find at many places in those days e. g. warrior Arjuna of the Pāṇḍavas was also called Phalguṇa from the constellation of that name under the influence of which he was born.

According to the Caraka Samhitā, Ātreya is the son

of Atri for in many places he is referred to as the son of Atri. Though the term Ātreya might apply either to the son of Atri or his near or distant descendants or to a disciple of Atri or even to one of the clan of Atri, yet as he is referred to as the son of Atri (अत्रिपुत्र) specifically, and also in view of the early times to which the tradition pertains, it may be fairly concluded that the Ātreya we are concerned with, is the direct son of Atri.

We find that in later days the royal physician of Śrī Harṣa was known as Rasāyana Paunarvasava (रसायन पुनर्वसव). This appellation of his may mean that he was either a descendant of Punarvasu or one versed in the science of medicine propounded by Punarvasu. Considering that those versed in surgery were known as Dhānavantariyas, Dhānavantari being the first propounder of the Science, it is probable to conclude that the experts in the science of medicine propounded by Punarvasu were known as Paunarvasavas.

Identity of Ātreya with Punarvasu

(1) The words Ātreya and Punarvasu are used together in the Caraka Samhita—

(१) तच्छ्रुत्वा काश्यपश्चो भगवान् पुनर्वसुरात्रेय उवाच ।

च. सू. १२-१३

(२) षडेव रसा इत्युवाच भगवानात्रेयः पुनर्वसुः ।

च. सू. २५-९

Also thus in Kāśyapa Samhita (काश्यपसंहिता)—

अल्पान्तरत्वाच्चेत्याह तमात्रेयः पुनर्वसुः

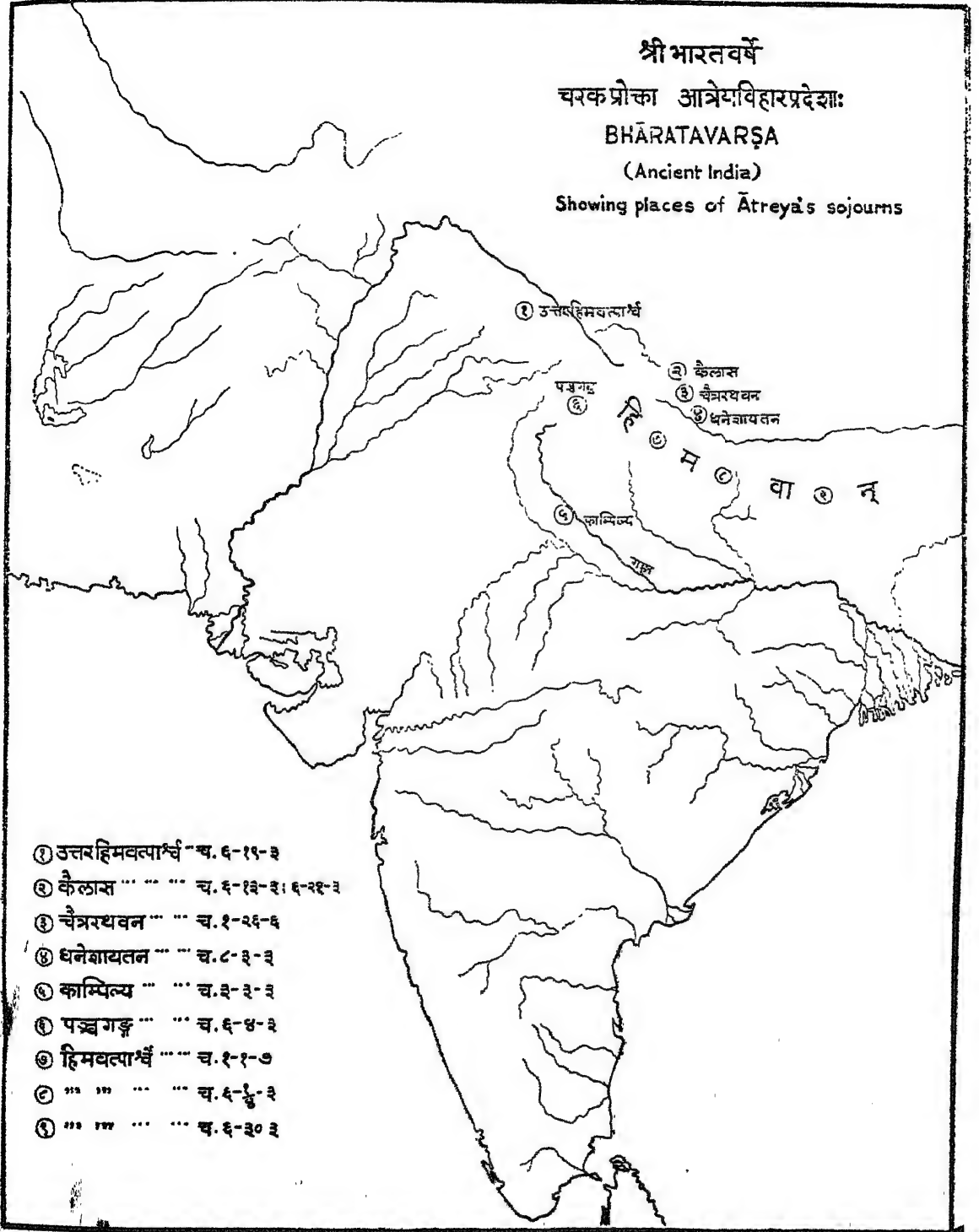
(2) 'Ātreya' and 'Punarvasu' words are used as synonyms at the end of the chapters thus:

In Caraka Samhita—

(१) महर्षीणां मतिर्या या पुनर्वसुमतिश्च या ।

कृत्वाकरीये वातस्य ततः सर्गः संप्रकाशितः ॥ च. सू. १२-१७

श्री भारतवर्षे
चरकप्रोक्ता आत्रेयविहारप्रदेशाः
BHĀRATAVARṢA
(Ancient India)
Showing places of Ātreya's sojourns



- १ उत्तरहिमवत्पार्श्व ... च. ६-१९-३
२ कैलास ... च. ६-१३-३; ६-२३-३
३ चैत्ररथवन ... च. १-२६-६
४ धनेशायतन ... च. ८-३-३
५ काम्पिल्य ... च. ३-३-३
६ पञ्चगङ्गा ... च. ६-४-३
७ हिमवत्पार्श्व ... च. १-१-७
८ ... च. ६-३-३
९ ... च. ६-३०-३

(२) स्वेदाधिकारे यद्वाच्यमुक्तमन्तमहर्षिणा ।

शिष्यैस्तु प्रतिपत्तव्यमुद्दिष्टा पुनर्वसुः ॥ च. सू. १४-५१

(३) यदसेव्यं विशुद्धेन यश्च संवर्जनकम् ।

तत् सर्वं कल्पनाध्याये व्याजहार पुनर्वसुः ॥ च. सू. १५-२५

There occur also in the Aṣṭāṅga Sangraha of Vāgbhaṭa—

धर्मार्थकाममोक्षाणां विघ्नहारिभिरानयैः ॥

नरेषु पीड्यमानेषु पुरस्कृत्य पुनर्वसुम् ॥ अ. सं. सू. १-४

ब्रह्मा स्मृत्वाऽऽयुषो वेदं प्रजापतिमजिग्रहत् ।

सेऽश्विनौ तौ सहस्राक्षं सेऽत्रिपुत्रादिकान्मुनीन् ॥ अ. ह. सू. १-३

(3) 'Punarvasu' is used as a substitute of Ātreya at the beginning of a chapter—

पुरा प्रत्यक्षधर्माणि भगवन्ते पुनर्वसुम् ।

समेतानां महर्षीणां प्रादुरासीदियं कथा ॥ च. सू. २५-३

Punarvasu is also mentioned as the preceptor of Agniveśa—

१. अथ मैत्रीपरः पुण्यमायुर्वेदं पुनर्वसुः ।

शिष्येभ्यो दत्त्वान् षड्भ्यः सर्वभूतायुक्म्पया ॥ च. सू. १-३०

२. सांख्यैः संख्यातसंख्येयैः सहासीनं पुनर्वसुम् ।

जगद्वितार्थं पप्रच्छ बह्विवेशः स्वसंशयम् ॥ च. सू. १३-३

Besides, even the epithet of भगवन्त is given to Punarvasu. (The verse is quoted above च-सू. २५-३)

Kṛṣṇa Ātreya seems to be his most popular appellation. As we have seen, the Mahābhārata refers to Kṛṣṇa Ātreya as the famous teacher of medicine. In the Caraka Saṃhitā itself Ātreya is often called Kṛṣṇa Ātreya.

(१) चरकं सू. ११

कृष्णआत्रेय-आत्रेय

(Beginning)—इति ह स्माह भगवानात्रेयः ॥ १ ५

(Enā) त्रित्वेनाष्टौ समुद्दिष्टाः कृष्णात्रेयेण धीमता ।

भावा, भादेव्यसक्तेन येषु सर्वं प्रतिष्ठितम् ॥ ६५ ॥

(२) च. चि. २८-१५६

अग्निवेशाय गुरुणा कृष्णात्रेयेण भाषितम् ।

(३) च. चि. २८-१६४

कृष्णात्रेयेण गुरुणा भाषितं वैद्यपूजितम् ।

(४) चक्रपाणिः

कृष्णात्रेयः पुनर्वसोरभिन्न एवेति वृद्धाः । च. चि. १५-१३१ टीका.

(५) मेलः

१. कृष्णात्रेयं पुरस्कृत्य कथाश्चकुर्महर्षयः । (पृ. २८)

२. अशीतिकं नरं विद्यात् कृष्णात्रेयवचो यथा । (पृ. १८)

(६) महाभारतम्

कृष्णात्रेयश्चिकित्सितम् ।

(७) श्रीकण्ठदत्तः and शिवदासः ।

कृष्णात्रेयः पुनर्वसुः ।

Also many of the tested recipes are named after him as commended or having been greatly favored by Kṛṣṇa Ātreya.

(1) त्रित्वेनाष्टौ समुद्दिष्टाः कृष्णात्रेयेण धीमता । च. सू. ११-६५

(2) नागराद्यभिदं चूर्णं कृष्णात्रेयेण पूजितम् ॥ च. चि. १५-१३१

(3) तवायसमिदं चूर्णं कृष्णात्रेयेण भाषितम् ॥ च. चि. १६-७१

(4) पलितप्तो विशेषेण कृष्णात्रेयेण भाषितः । च. चि. २६-२७८

(5) अग्निवेशाय गुरुणा कृष्णात्रेयेण भाषितम् । च. चि. २८-१५६

(6) कृष्णात्रेयेण गुरुणा भाषितं वैद्यपूजितम् ॥ च. चि. २८-१३४

There can, thus, be no confusion as regards the identity of the person known as Ātreya with Kṛṣṇa Ātreya in the Caraka Samhitā. For in the chapter XI of Sūtra-sthāna, we find the usual 'worshipful Ātreya' in the initial lines and at the end in the resumé he is referred to as Kṛṣṇa Ātreya. Thus Bhagawān Ātreya, Punarvasu, Ātreya and Kṛṣṇa Ātreya are the names of one single individual sage who is the teacher of the science of medicine in the Caraka Samhitā.

To leave no scope for doubt on this point the following will be useful.

Bhela, being a disciple of Ātreya along with Agniveśa and others, refers to Ātreya as Kṛṣṇa Ātreya in the Bhela Saṃhitā.

कृष्णात्रेयं पुरस्कृत्य कथाश्चकुर्महर्षयः । (मे. सू. वातकलाकलीय.)
अशीतिकं नरं विद्यात् कृष्णात्रेयवचो यथा । (मे. ९८)

There is a tantra or a treatise on Śālākya (शलालक्य) or 'Surgery of the supra-clavicular parts of the body' ascribed to Kṛṣṇa Ātreya. On this ground some are led to believe that there existed two persons of this name.

Śrīkaṇṭha Datta (श्रीकण्ठ दत्त) in his commentary on Vṛndāś Siddhayoga (सिद्धयोग) states—

- (१) ननु च तन्त्रान्तरीयेः षड्विधः कदलः पठितः । तथा च कृष्णात्रेयः ।
- (२) शालाकिभिस्तु प्रतिदोषं पठितानि द्रव्याणि । तथा च कृष्णात्रेयः ।
- (३) पौडशशुणं चाम्भः कृष्णात्रेयपरिभाषायां मन्तव्यम् ।

Similarly, Śivadāsa (शिवदास) in his commentary 'Tattva-Candrikā' (तत्त्व-चन्द्रिका) while describing Daśamūlaśatapalaghṛta (दशमूलशतपलघृत) quotes from Jwarādhikāra (ज्वराधिकार) of Cakradatta (चक्रदत्त) and cites the names of Gopura Rakṣita (गोपुररक्षित), Jatūkarna (जटुकर्ण), Caraka (चक्र), Suśruta (सुश्रुत), and Kṛṣṇa Ātreya (कृष्णआत्रेय). But both the above authors—Śrīkaṇṭha Datta and Śivadāsa, have raised the question of two personalities, Kṛṣṇa Ātreya the surgeon and Ātreya the physician; but, while commenting on the line 'नागराद्यभिर्दं चूर्णं कृष्णात्रेयेण पूजितम् ।' they distinctly state कृष्णात्रेयः पुनर्वसुः ।

The commentator Śivadāsa holds the view that Kṛṣṇa Ātreya and Punarvasu are one.

Even if Kṛṣṇa Ātreya appears to have given instruction on surgical matters it does not follow that he could not have been identical with Ātreya Punarvasu, the teacher in the Caraka Saṃhitā. He must have been acquainted with the whole of the Science of Life in all its eightfold ramifications, though he confined himself to Kāyacikitsā or medicine, in his exposition before Agniveśa and other disciples. There is thus nothing to contradict the conclusion that there existed but one teacher known variously as Punarvasu, Ātreya and Kṛṣṇa Ātreya.

He was also known as Cāndrabhāgi (चान्द्रभागि) or Cāndrabhāgin (चान्द्रभागिन्). The 13th chapter of Sūtra-sthāna in Caraka refers

to the teacher by this name. Punarvasu is mentioned as seated amidst the Sāṅkhya philosophers whom Agniveśa approaches for instruction and in the resumé at the end of the chapter, the teacher is referred to as Cāṇdrabhāgi. The commentator Cakrapāṇi contents himself by saying that Cāṇdrabhāgi is Punarvasu.

We are left to conjecture the derivations of this name for him. It may be, he is the son of Cāṇdrabhāgā or a resident of the region named Cāṇdrabhāga. A tributary of the Indus was also known by that name. Being resident on its banks, he might have been known as Cāṇdrabhāga. The sister compilation to that of Agniveśa's (Caraka Saṃhitā), namely the Bhela Saṃhitā, supports this view that Ātreya Punarvasu and Cāṇdrabhāgi are one and the same person.

Thus we have the great sage Ātreya, the teacher of medicine and preceptor to Agniveśa, Bhela and other disciples, bearing other names of Kṛṣṇa Ātreya, Punarvasu and Cāṇdrabhāgi as all these names are applied to him in the Caraka Saṃhitā as well as in the Bhela and Kāśyapa Saṃhitā and are supported by references to him in other books like the Mahābhārata in similar contexts.

Beginning of the chapter

संख्यैः संख्यातमख्यैः सहासीनं पुनर्वसुम् ।

जगदिनार्थं पप्रच्छ ब्रह्मिणः स्वसंशयम् ॥३॥

च. सू. १३

Ending

स्नेहाः स्नेहविधिः कृत्स्नव्यापत्तिद्विः समेषजः ।

यथाप्रश्ने भगवता व्याहृतं चान्द्रभासिना ॥१००॥ च. सू. १३

चान्द्रभासिः—

चान्द्रभासी पुनर्वसुः ।

जेकरहितः—

(1) सुश्रेता नाम मेधावी चान्द्रभागमुवाच (P.39)

The verse in the Bhela Saṃhitā is very significant as it combines the names of Cāṇdrabhāga and Punarvasu while referring to the teacher of medicine.

(2) यान्धारदेशे राक्षसिर्नृपचित् स्वर्णमायंक्षुः ।

संशयं पादौ पप्रच्छ चान्द्रभासं पुनर्वसुम् ॥ (P.30)

"Nagnajit, the saintly king of Gāndhāra, giver of the path to gold, grasped the feet of Cāndrabhāgi Punarvasu in obeisance, and inquired."

Thus the verse provides us with a confirmation of the identity of Cāndrabhāga with Punarvasu and also offers a clue as to the period of his existence by mentioning the name of his disciple the king of Gāndhāra named Nagnajit (नगजित्).

In the Caraka Samhitā there are mentioned as his contemporaries who participated in the discussions on various medical topics, the king of Kāśi named Vāmaka (वामक) and Nimi (निमि) the king of Videha. Thus, this leads us to the question of the period of Ātreya in the chronicles of ancient Indian history.

The Period of Ātreya

It would be a very interesting and engaging study to try to fix the date of Ātreya. There is a certain preceptor Ātreya, the teacher of Jivaka (जीवक). The stories about Jivaka are found in the literatures of various countries where Buddhism flourished. Tibetan, Burmese and Sinhalese versions differ in many points. In the Tibetan Tales (तिब्बतीय उत्सव), we find that Ātreya of Takṣaśilā (तक्षशिला) was the preceptor of Jivaka. The Burmese version says that Jivaka went to Kāśi and not to Takṣaśilā for studies. They however, differ on the point of Ātreya's preceptorship to Jivaka. They say that Jivaka's preceptor was Diśāpramukha (दिशाप्रमुख) or Mānakācārya (मानकचार्य) or Kapilākṣa (कपिलाक्ष). Moreover, in the Tibetan stories where Ātreya is mentioned as the preceptor of Jivaka, we do not find any other epithet of Ātreya. In one book the epithet Piṅgala (पिङ्गल) is used for Ātreya.

Jivaka has never mentioned anywhere Ātreya as his preceptor nor Agniveśa as his co-student. In the same way, Agniveśa never mentions Jivaka anywhere in his whole treatise. Jivaka went to study "head surgery" according to a Tibetan story, while Punarvasu Ātreya was primarily a physician.

In the Caraka Samhitā, some mention of abdominal surgery is found but no reference at all to "head surgery". Thus the inference that

Ātreya was the preceptor of Jīvaka is based on flimsy grounds, and even the acceptance of Ātreya as the preceptor of Jīvaka does not establish his identity with Pinarvasu Ātreya. Some scholars suggest that he may be Bhikṣu Ātreya (भिक्षु आत्रेय) but as we shall see that Bhikṣu Ātreya (भिक्षु आत्रेय) was a contemporary of Pinarvasu Ātreya, even that theory is erroneous.

आत्रेयो गौतमः सत्त्वः पुलस्त्यो नारदोऽसितः ॥ ८ ॥

अगस्त्यो वानदेवश्च मार्कण्डेयाश्चलावनौ ।

पारिक्षिमिष्ठुरात्रेयो भरद्वाजः कपिष्ठ(ठ)लः ॥ ९ ॥

च. सू.-१-२५

तत्रेति मिष्ठुरात्रेयो(न ह्यपत्यं प्रजापतिः) । च. सू. २५ - २४

The person referred to as Bhikṣu Ātreya (भिक्षु आत्रेय) in the text of Caraka is not the preceptor of Jīvaka. The preceptor of Jīvaka if he was at all an Ātreya, he must be some other descendant of Atri.

As we have seen above Takṣaśilā is mentioned in connection with Jīvaka. There is no mention of Takṣaśilā in Caraka, Bhela and Kāśyapa Saṃhitas though we find the names of Gāndhāra (गान्धार), Pāncāla (पांचाल), Kāmpīlya (काम्पिल्य), Kāśī (काशी), Pañcagaṅga (पञ्चगङ्गा) etc. This inevitably leads us to the conclusion that Taxilla might not have been developed as a centre of learning in Ātreya's period. Ātreya must have flourished before Taxilla had become a reputed seat of learning. Enquiry into the period of Taxilla will help us in fixing up the period, or at any rate the terminus ad quem of Ātreya's period.

1. There is no mention of Taxilla in the Vedas or in the Upaniṣads.

2. In the Uttarakāṇḍa (उत्तरकाण्ड) or the supplementary portion of Rāmāyaṇa (रामायण), we find that Bharata (भरत) conquers the country and his son Takṣa (तक्ष) is placed to rule over the conquered territory and hence it is called Takṣaśilā.

तक्षं तक्षशिलायां तु पुष्कलं पुष्कलावते ।

गन्धर्वदेवो रुचिरे गान्धारविषये च सः ॥ ११ ॥

रामायण उ. का. अ. १०१

3. Janmejaya's serpent sacrifice was performed at this place.
4. Taxilla becomes a famous seat of learning by the seventh century B. C.
5. Historical records place its glorious period from 700 B. C. to 500 A. D. attracting scholars from distant cities. e. g. Rājagṛha (राजगृह), Kāśī (काशी) and Mithilā (मिथिला). Jīvaka (जीवक), Brāhmadatta (ब्रह्मदत्त), Kautilya (कौटिल्य), Patañjali (पतञ्जलि), Pārśva (पार्ष्व), Vasumitra (वसुमित्र) and Aśvaghōṣa (अश्वघोष) are scholars of Taxilla.

6. The grammarian Pāṇini mentions Taxilla. From the above data Ātreya seems to have flourished before the glorious period of Taxilla. Now, the glorious period of Taxilla coincides with the times of the Buddha and as the Buddha period is placed, by historians, in the 6th century B. C. we can say that Ātreya flourished before the period of Buddha. Thus the Buddha-period becomes the terminus ad quem.

In order to fix Ātreya's period with degree of accuracy, one will have to establish the upper limit or the terminus a quo of Ātreya's period. In the Caraka Saṃhitā we find references to Kāmpilya (कम्पिल्य) and Pañcāla (पञ्चाल). The former place is well known in Śukla Yajurveda (सुक्ल यजुर्वेद), Taittirīya Brāhmaṇa (तैत्तिरीय ब्राह्मण) and Maṭṭrāyaṇīya Kāṇhaka Saṃhitā (मैत्रायणीय काण्वकसंहिता), while the latter also seems to have been equally well known in the Veda, Brāhmaṇas and the Upaniṣads. So, Ātreya must have flourished during the period when Kāmpilya and Pañcāla were well-known places. As these places were well-known in the Vedic, Brāhmaṇa and Upaniṣadic periods, we can say that Ātreya must have flourished not later than this period.

Thus the Brāhmaṇa or the Upaniṣadic period is the latest time when Ātreya must have systematised and preached the medical science. Having determined that Ātreya flourished before the Buddhist period and during the Upaniṣadic period, we must try to narrow down the period between the terminus a quo and terminus ad quem as much as possible.

The study of the contemporaries of Ātreya in order to attempt to fix their dates is bound to yield useful results. In

the Caraka Saṃhitā, we find from various references that Mārica (मारीच), Kāśyapa (कश्यप), Vāryovida (वार्योविद), Marīci (मरीचि) and Kāśyapa (कश्यप) were contemporaries of Ātreya.

(a) काङ्कायनः केकरोयं धौम्यो मारीचकश्यपौ । च. सू. १-१२

Mārica and Kāśyapa are mentioned as Rṣis who attended the Hīmalayan conference in company with Ātreya.

(b) तन्मूत्रं वार्योविदवचो मरीचिवाच-यद्यप्येवमेतत् किमर्थस्यास्य वचने विज्ञाने वा सामर्थ्यमस्ति निश्चिन्त्यायां निश्चिन्त्यामधिकृत्यैः कथा प्रवृत्तेति । च. सू. १२. ९

(c) मरीचिवाच—अग्निरेव शरीरं दित्तान्तर्गतः कुपिताकुपितः शुभाशुभानि करोति । तद्यथा—पक्षिमपक्षि हर्षनमर्शनं मात्रामात्रत्वमूष्मणः प्रकृतिविकृतिवर्णैः शौर्यं भयं क्रोधं हर्षं मोहं प्रसादमित्येवमारीचि वापराणि द्वन्द्वानीति । च. सू. १२-११

Here, as seen in the above passage, Ātreya (आत्रेय), Marīci (मरीचि) and Vāryovida (वार्योविद) meet in the same assembly and discuss. In this assembly Marīci gives the authoritative statement about the action of Pitta while Vāryovida (वार्योविद) establishes the actions and qualities of normal and abnormal Vāta. This shows that all these were contemporaries.

(d) परोक्षत्वादविन्द्यमिति मारीचिः कश्यपः ।

च. शा. ६. २१

Here Marīci Kāśyapa (मारीचि कश्यप) is quoted by Ātreya as the propounder of the theory that the spirit is unthinkable as it is not the object of direct observation.

The references pertaining to Vāryovida are as follows:

(a) तन्मूत्रं वार्योविदवचनमवितममृषिगणैरनुमतमुवाच वार्योविदो राजर्षिः..... ।

Here Vāryovida (वार्योविद) is mentioned as the authority on Vāta or Vāyu and he is in discussion with Marīci and Ātreya.

(b) वार्योविदस्तु नेत्याह न कोऽयं कारणं मनः ।

नर्ते शरीराच्छरीररोगा न मनसः स्थितिः ॥

रक्षजानि तु भूतानि व्याधयश्च पृथग्विधाः ।

जापो हि रक्षस्यश्वाः स्फुटा विरुतिरेव ॥

च. सू. २५-१२, १३

the Caraka Saṃhitā, we find from various references that Mārica (मारीच), Kāśyapa (कश्यप), Vāryovida (वार्योविद), Marīci (मरीचि) and Kāśyapa (कश्यप) were contemporaries of Ātreya.

(a) काङ्कायनः केकरोयं धौम्यो मारीचकश्यपौ । च. सू. १-१२

Mārica and Kāśyapa are mentioned as Rṣis who attended the Hīmalayan conference in company with Ātreya.

(b) तन्मूत्रं वार्योविदवचः मरीचिवाच—यद्यप्येवमेतत् किमर्थस्यास्य वचने विज्ञाने वा सामर्थ्यमस्ति निश्चिन्त्यायं निश्चिन्त्यायमधिकृत्यैः कथा प्रवृत्तेति । च. सू. १२. ९

(c) मरीचिवाच—अग्निरेव शरीरं दित्तान्तर्गतः कुपिताकुपितः शुभाशुभानि करोति । तद्यथा—पक्षिमपक्षि हर्षनमर्शनं मात्रामात्रत्वमूष्मणः प्रकृतिविकृतिवर्णैः शौर्यं भयं क्रोधं हर्षं मोहं प्रसादमित्येवमारीचि कापरणि द्वन्द्वानीति । च. सू. १२-११

Here, as seen in the above passage, Ātreya (आत्रेय), Marīci (मरीचि) and Vāryovida (वार्योविद) meet in the same assembly and discuss. In this assembly Marīci gives the authoritative statement about the action of Pitta while Vāryovida (वार्योविद) establishes the actions and qualities of normal and abnormal Vāta. This shows that all these were contemporaries.

(d) परोक्षत्वादविन्द्यमिति मारीचिः कश्यपः ।

च. शा. ६. २१

Here Marīci Kāśyapa (मारीचि कश्यप) is quoted by Ātreya as the propounder of the theory that the spirit is unthinkable as it is not the object of direct observation.

The references pertaining to Vāryovida are as follows:

(a) तन्मूत्रं वार्योविदवचनमवितममृषिगणैरनुमतमुवाच वार्योविदो राजर्षिः..... ।

Here Vāryovida (वार्योविद) is mentioned as the authority on Vāta or Vāyu and he is in discussion with Marīci and Ātreya.

(b) वार्योविदस्तु नेत्याह न कोऽयं कारणं मनः ।

नर्ते शरीराच्छरीररोगा न मनसः स्थितिः ॥

रक्षजानि तु भूतानि व्याधयश्च पृथग्विधाः ।

जापो हि रक्षस्यश्वाः स्फुटा विरुतिरेव ॥

च. सू. २५-१२, १३

Here we see him as the propounder of the theory of the nutrient fluid being the source of both—nam and disease (रसज व्याधयः and रसजः पुष्टयः). He is the contemporary of Ātreya as well as of Nimi (निमि) of Videha.

श्रीमान्वायौविदश्चैव राजा मतितां वरः ।

निमिश्च राजा वैदेहो बडिशश्च महामणिः ॥

काङ्कायनश्च बाह्लीको बाह्लीकनिपतिं वरः ।

च. नं. २६, ४-५

Vāryovida attends this assembly met to discuss the categories of taste. Among others who attend are Nimi of Videha and Kāṅkāyana the physician from Bāhlika (Modera Balkh). Vāryovida propounds the theory that there are six categories of taste. He is given the epithet of Rājarṣi while Nimi is given the epithet of Rājā.

These references in the Caraka indicate that Ātreya, Marici Kāśyapa, Vāryovida, Nimi of Videha and Kāṅkāyana of Bāhlika flourished at the same period. If we can fix up with certainty the date of any one of them, the dates of all others can be decided by the process of synchronism.

The contemporaneity of Ātreya, Kāśyapa and Vāryovida is supported by Kāśyapa Samhitā also. (श. सं. सू. २७-३)

Vāryovida and Nimi propound their own theories about the classification of disease and the presiding Ṛṣi Kāśyapa gives the final authoritative decision in the matter.

इत्याह नाग्यो नेत्याह वाळ्वादिति साठरः ।

मासेन शस्यते मासाद् बालो हि रसादवस्थितः ।

अल्पान्तरत्वाच्चेत्याह तमात्रयः पुनर्वसुः ।

चतुर्मास्योऽनुवास्य (स्तु)..... ॥

त्रिवर्गस्यैव तु हिनं नेति भेदस्तमश्नुवीत् ।

अल्पान्तरत्वं द्वाघाता द्विभ्रमाणामपेक्षत् ॥

षड्वर्गस्येतीतां तु भेद.....

.....पक्ष्मेषु सूक्ष्मेषु पुनः पुनः ।

निश्चयार्थं ततः सर्वे कश्यपं पर्थचोदयत् ॥

(क्रा. सं. सि. १, ११-१२-१३)

between Ātreya's system and his own in respect of the total number of the bones."

Besides this, there are clear indications in the Śatapatha Brāhmaṇa (शतपथ ब्राह्मण), a post-Vedic work, that the author was acquainted with the doctrine of both Ātreya and Suśruta.

आत्मा ह त्वेवैषोऽभिधीतः । तस्यास्तीत्येव पण्डितज्ञाः पण्डितं त्रीणि च शतानि भवन्ति ।
पण्डितश्च ह वै त्रीणि च शतानि पुरुषस्यास्तीति मज्जानी मनुवाच इत्यकारतः पण्डितश्चैव त्रीणि च शतानि भवन्ति
• पण्डितश्च ह वै त्रीणि च शतानि पुरुषस्य मज्जानोऽयम् ।

स. ब्रा. १० अ. ४-८

"But indeed that fire-altar also is the body, the bones are the enclosing stones and there are 360 of these, because there are three hundred and sixty bones in man. The marrow parts are the Yajusmati bricks, for there are three hundred and sixty of these and three hundred and sixty parts of marrow in man."

In Caraka we find (चतुर्दशोरसि शा. ७-३) there are fourteen bones in the breast. In Suśruta this number is given as seventeen (सप्तदशोरसि सु. शा. ४-१९).

Śatapatha seems to have taken the number of breast-bones from Suśruta.

The anatomical comparisons quoted above show that at the time of Śatapatha, both the medical schools, of Ātreya and Suśruta, were in existence and that the author possessed some knowledge of their respective theories of the skeleton. For he derived from Suśruta the allotment of seventeen bones to the breast while according to Caraka the bones are only fourteen, while he got the total of 360 bones of the skeleton from Ātreya, Suśruta having only 300. In his choice of particulars from the two systems, of course, he was guided by the requirements of his mystic treatment of the fire-altar.

The author of the Śatapatha Brāhmaṇa is Yājñavalkya (याज्ञवल्क्य) who is said to have flourished at the court of Janaka (जनक), the famous king of Videha, and contemporary of Ajātaśatru (अजातशत्रु). The latter, the celebrated ruler of Magadha was a contemporary of the Buddha. His accession took place approximately in 554 B. C.

Accordingly, Yājñavalkya may be dated about 575 B. C. So the dates of Ātreya and Suśruta must be placed some time before that period, and Ātreya being anterior to Suśruta, he can safely be placed at least in the seventh century B. C.

This date of Ātreya is pushed back to further antiquity by the evidences found in the Atharvaveda. As evidence of the very early date of both Ātreya and Suśruta, we have a rather significant passage in the Atharvaveda. It occurs in the tenth book, as a hymn on the creation of man, in which the several parts of the skeleton are carefully and systematically enumerated in striking agreement more especially with the system of Ātreya as contained in Caraka's compendium. The date of the Atharvaveda is not exactly known, but it belongs to the most ancient, or primary Vedic literature of India. It cannot be placed later than the eighth century B. C. because references to it are found in secondary Vedic works, such as the Śatapatha Brāhmaṇa above referred to. The large portion of it (books I to XVIII) admittedly belongs to a much earlier period, possibly as early as about 1000 B. C., and the hymn in question is included in this older portion. Moreover, within that portion it belongs to a division (books VIII-XII) which bears a distinctly hieratic character. It thus takes us back to that pre-historic or the semi-mythical age of the medicine man who combined the functions of priest and physician. This period as already stated, is represented conspicuously by the great sage Bharadvāja and to him it actually ascribes the authorship of one of the hymns (the twelfth of the tenth book) of that hieratic division.

So the period of Ātreya can be bracketed between the end of Atharva-period and the beginning of Śatapatha-period.

Let us see if the method of exposition and the language used are of any help to us in fixing the date. The main text of Ātreya seems to have been composed during the 'Sūtra period' or the aphoristic period which appeared at the end of the Vedic period. The rise of this class of writings was due to the need of reducing the vast and growing mass of details of knowledge and experience accumulated during the Vedic period in the whole of Aryāvarta,

to a systematic shape and of compressing them into a compact form which would not impose too great a burden on the memory, the only vehicle of all teaching and learning in those days. The main object of the Sūtras was therefore to supply a short but comprehensive survey of the sum of these scattered details. For this purpose, the utmost brevity was needed, a requirement which was certainly met in a manner unparalleled elsewhere. The very name of this class of literature (Sūtra सूत्र 'thread' or 'clue' from सिद् to sew) points to its main characteristic and chief object viz., extreme conciseness. The prose in which these works were composed is such that the wording of the most laconic expression would often appear diffuse compared with it. Some of the Sūtras attain to such a degree of terseness that the formulas cannot be understood without the help of elaborate commentaries. A characteristically aphoristic verse which defines the nature of a Sūtra is here.

अल्पाक्षरमसन्दिग्धं सारवद्विश्वतोमुखम् ।

अस्तोकमनवयं च सूत्रं सूत्रविदो विदुः ॥

"This is called a Sūtra which has the least number of words, is unambiguous, synoptical, all-embracing, devoid of any superficial word and faultless."

According to it, the compilers of grammatical Sūtras delighted as much as in the saving of a short vowel as in the birth of a son (अर्थमात्रालाभवेनापि पुत्रोत्सवं मन्यन्ते वैयाकरणाः).

The first section of Ātreya Samhitā is called Sūtra-sthāna. This Sūtra style needed interpretation and commentaries and hence it was essential to study under a Guru who could interpret the Sūtras. This is also one of the reasons why later on so many commentaries on this Samhitā were written.

Linguistic investigations tend to show that the Sūtras are closely connected in time with the grammarian Pāṇini, some of them appearing to be even anterior to him. We shall therefore probably not go far wrong in assigning 7th to 2nd century B. C. as the chronological limits within which the Sūtra literature was developed.

Another evidence which leads us to place Ātreya some time in the Śatapatha Brāhmaṇa period is the assembly-system so often mentioned in his treatise. The philosophical disquisitions are the characteristic feature of the Brāhmaṇa period. It was a special function of the Brahmin priest to give decisions on many disputed points that may arise in the course of a sacrifice, and this he could not have done unless he was a master of ratiocination. Such decisions which may be likened to the chairman's rulings in a modern assembly are scattered through the ancient Brāhmaṇas and are collected together as so many deductions (व्याख्या) in the Pūrva Mīmāṃsā (पूर्वमीमांसा) aphorisms of Jaimini (जैमिनी).

These tournaments of arguments form a prominent feature in the later books of Śatapatha Brāhmaṇa. The hero of these is Yājñavalkya who is regarded as the chief authority, like Ātreya in the Caraka Saṃhitā.

In the Bṛhadāraṇyakaopaniṣad (बृहदारण्यकोपनिषद्) which forms the concluding portion of the last book named Āraṇyaka (आरण्यक) of both the recensions of Śatapatha Brāhmaṇa, the second part of the Upaniṣad (उपनिषद्) consists of four philosophical discussions in which Yājñavalkya is the chief speaker. Out of these four, the first is a great disputation in which the sage proves his superiority over nine successive interlocutors. The second discourse is the dialogue between king Janaka and Yājñavalkya. The third discourse is another dialogue between them. The fourth is the discourse between Yājñavalkya and his wife Maitreyī (मैत्रेयी).

In the Caraka Saṃhitā we find the following discussions.

In the 10th chapter of Sūtra-sthāna there is depicted a dialogue between the main speaker Ātreya and Maitreya.

Ātreya gives a warning at the end thus:—

साध्यासाध्यविभागज्ञो यः सम्यक् प्रतिपत्तिमाह ।

न स मैत्रेयतुल्यानां मिथ्याबुद्धिं प्रकल्पयेत् ॥२२॥ च. सू. १०

"One who knows the differential diagnosis between curable and incurable diseases, as also the right application, will not fall into such erroneous mode of thinking as Maitreya and others did.

In the 12th chapter of Sūtra-sthāna the discourse is among the Ṛṣis, Kuṣa Sāṅkītyāyana, Kumārasīna Bharadwāja, Kāṅkāyana Bāhlika, Baḍiśa Dhāmārgava, Varyovida Rājarsi, Marici, Kāpya, and Ātreya.

Each of them discusses one aspect of the subject and Ātreya, the presiding sage, links all the aspects in one integrating form.

In chapter 25th of Sūtra-sthāna, Kāśipati Vamaka approaches the assembly of Ṛṣis for the solution of a question. Parikṣi (पारिक्षि), Maudgalya (मौद्गल्य), Śaraloma (शरलोमा), Vāryovida (वार्योविद), Hiranyākṣa (हिरण्यक्ष), Kuṣika (कुषिक), Kauṣika (कौषिक), Bhadrakāpya (भद्रकाप्य), Bharadwāja (भरद्वाज), Kāṅkāyana (काङ्कायन), Bhikṣu Ātreya (भिक्षु आत्रेय), each of these propounds his own theory and insists tenaciously on its acceptance. The presiding sage Ātreya exhorts all of them to be more rational and scientific and gives his authoritative decision on the subject.

Similarly, in chapter 26th of Sūtra-sthāna, nine sages meet and each propounds his own theory in the discourse on the categories of taste (रस). Finally, the learned Ātreya expounds giving the decision in the matter.

वादान् स्रतिवादान् हि वदन्तो निश्चितानिव ।

पक्षान्तं नैव गच्छन्ति तिलसीडकवद्वतौ ॥२७॥

मुक्त्वैवं वादसङ्घटनव्यात्मननुचिन्त्यताम् ।

नाविधूते तमःस्कन्धे ज्ञेये ज्ञानं प्रवर्तते ॥२८॥

च. सू. २५

“Those who advance arguments and counter-arguments as if they were finalities, never in fact arrive at any conclusion, going round and round like the man who sits on the oil press. Therefore letting go this wordy warfare, apply your minds to the essential truth, but without dispersing the obscuring cloud (of passion) there can be no proper appreciation of the object that is to be known”.

In the 3rd chapter of Śārīra-sthāna again, there is a discourse between Bharadwāja and Ātreya.

Elaborate rules and regulations about the conducting of such meetings are given in great details in the Vimāna-sthāna chapter VIII.

Reviewing the matter and manner of these discourses and the importance attached to such meetings, one feels that Ātreya's treatise must have been composed during the period when such disquisitions were the prevalent system of establishing the final truth in a matter of dispute. Thus Ātreya's period coincides with the Śatapatha period.

Taking into view the internal and external evidence supported by historical consistency we are led to place Ātreya in a period not deflection much on either side of the 8th century B. C. but certainly not later than 7th century B. C.

Ātreya, as a teacher

As a teacher of medicine, Ātreya is of a very high order judged from the methods he adopted to instruct his disciples and of the arrangement and classification of the subjects and medical concepts. All the parallel treatises such as those of Kaśyapa, Hārīta and Bhela, refer to him as the accredited teacher and authority on medicine.

It is therefore necessary that we learn of the methods of instruction he pursued in achieving this supremacy as a teacher.

At the beginning of each lesson, he categorically announces the definite subject he proposes to expound. Then, often it happens that the disciples headed by Agniveśa put inquiring questions in order to spot-light the salient points of the subject proposed. And the teacher while expounding these salient points covers the whole field of the proposed subject. Occasionally, there are intelligent interjections by Agniveśa asking for clarification on points, as for example, when the teacher commends the real physician as against the quack, Agniveśa asks, "How are we to know the real physician from the quack?" and a most impressive delineation of the difference between the quack and the real physician is given by Ātreya (च. उ. २३). Again after proposing the subject to be expounded, the various disciples or the sages and learned men assembled about the teacher, are invited to offer their individual views. The great discussions on the subject of Vāta and of Rasa are supreme examples of this kind. After listening to the views of each of the learned men participating in the

discussion, Ātreya sums up his opinion which is sometimes categorically offered and sometimes elaborated by arguments and illustrations. Though in later days there obtained in India the Socratic method known as teacher-disciple dialogues (उद्देश्यवाद) yet Ātreya's cannot be called such a method. It is in its form more ancient and related to the Brāhmanical method of discussion. Only, it is milder in spirit without the bravado and vehemence that characterises the part played by exponents like Yājñavalkya in the debates conducted under the patronage of king Janaka. There is a true spirit of inquiry and a desire for discovering and accepting the truth on a subject is transparent in these discussions, but no desire to assert oneself and score a victory in debate. This became the spirit of a later day though it was condemned by Ātreya as unworthy of good men. (Cat. Vim VIII 22-23)

विगृह्य कथयेद्युक्त्या युक्तं च न निवारयेत् ।

विगृह्यभाषा तत्र दि केषांचिद् द्रोहमावहेत् ॥ २२ ॥ च. वि. ८

नाकार्यमस्ति कुदस्य नावाट्यमपि विद्यते ।

कुशला नाभिनन्दन्ति कलङ्गं सभितौ सताम् ॥ २३ ॥ च. वि. ८

"In a hostile debate, one should speak supported by reason and skill and never object to statements backed by authority. The hostile debate, which is serious, enrages some people.

And there is nothing that an enraged man may not do or say, and wise men never commend a quarrel before an assembly of good men".

Throughout, in these discussions, Ātreya conducts himself with great dignity, composure and understanding. He listens to the expositions of the different views of the scholars assembled and after duly weighing them, gives out his own considered opinion which is invariably accepted as final by the assembly. Occasionally he warns his disciples against the error fallen into by any of the disputants, as for example he warned his disciples and others present against "falling into the same error as did Maitreya and others like him on the question of treatment and non-treatment being equal in their results".

न स मैत्रेयतुल्यानां मिथ्यावृद्धिं प्रकल्पयेत् । च. सू. ११, २२

He warns against clinging to an argument (वृद्धि) also.

(च. सू. २५, २६-२७)

The spirit of reverence with which his disciples approach him as he is seated amidst sages and scholars including occasionally the learned rulers of neighbouring kingdoms or foreign scholars and the finality his discussions acquire in the discussions among these sages and scholars, and also the shifting scene of such assemblies from the northern Himālayas to the eastern part like Kailāsa and the southern plains of Kāmpilya are indubitable indications of the popularity, wisdom and supremacy among his contemporaries, of Ātreya as a teacher of medicine.

Besides, for us the significance lies in the stamp of methodical and scientific exposition, he imparted to the mass of medical lore that perhaps lay till then in amorphous heap of drugs and data. The stage of rational or scientific medicine began with Ātreya. Though the concept of the three controlling forces of the body as of the universe is contained in the Vedic literature, it is to Ātreya that medicine owes its full elaboration of the Tridoṣa (त्रिदोष) concept in a consistent method and based on a logic of elemental combinations and physico-chemical transmutations. With the theory of taste and its influences on metabolic and physiological functions and its application in therapeutics, the concept of the Rasa (रस), Guṇa (गुण), Virya (वीर्य) and Vipāka (विपाक) and Prabhāva (प्रभाव) of drugs, Medicine passes from the empirical stage to a scientific stage, based and supported on bio-physical and bio-chemical concepts.

Though Caraka and Dṛḍhabala may be given credit for the present arrangement of the various sections and the order of the chapters etc, yet the essential rationale running through the entire length of the treatise and the basic concepts and generalisations on drug, disease-factors and methods of therapeutics, belong to Ātreya and have been kept intact and perhaps have been embellished by details of illustration by the redactors.

The rational spirit of the teacher is so strong that even maladies which admitted of a religious or demoniac origin and were actually believed to be such by others, were put down by Ātreya as due to purely physical and physiological causes and to volitional transgression, and were exhorted to be treated like other diseases. While describing Insanity, Ātreya lays

down that neither the gods nor the demons have anything to do with it and must be known to result from wrongful behaviour and must be countered by suitable remedies.

नैव देवा न गन्धर्वा न दिशाक्षा न राक्षसाः ।

न चाप्ये ह्यथमस्ति मुक्तास्ति ह्यन्ति मानवश्च ॥ १९ ॥

स. नि. '9

"Neither gods nor the Gandharvas, neither the goblins nor the demons, nor aught else, torment the man who is not tormented of himself."

It is remarkable that in similar fashion does Hippocrates of Greece explain 'epilepsy' which till then was named a 'sacred disease.' He says, 'It is thus with regard to the disease called sacred. It appears to me to be no wiser more divine nor more sacred than other diseases but has a natural cause from which it originates like other affections. The cause is no longer divine but human.'

It is therefore natural to surmise that the time of Ātreya coincides with that in which the general tendency in Indian life and thought became rational, when inquiry into the original causes of things was initiated and pursued i. e. in the Upaniṣadic or the Brāhmaṇa period, that succeeded the age of revelation and intuition to which the Veda belongs. Thus in the heyday of Indian speculative thought, Ātreya taught his elaborations of the theory of drug and disease and ushered in the age of scientific medicine. He gave it the framework of a metaphysic of medicine, a basement of theory that could sustain the elaborate edifice of pathology and therapeutics so minutely evolved and completed at a time when humanity in general was still cradled in its infancy as regards scientific thought and practice. Surpassing the glowing demi-god Bharadvāja, who brought down the beneficent lore from the king of the gods, Ātreya stands supreme among the teachers of the Science of Life among men, a teacher conspicuous for sweet reasonableness, breadth and comprehensiveness of wisdom as of vision and clarity of definitions, and above all, expert in the correlating of drug to disease. He is thus supreme as a therapist and has earned the immortal name of being the originator of medicine.

Ātreya is a name, immortal in Indian medicine and will remain so as long as the science of life is studied and practised in the light and spirit of his principles and basic theory.

His attachment to reason and the happy results flowing from scientific understanding as against fads and unreasoned faith, which make for ignorance, is borne out by his exemplary definition of knowledge and happiness.

समग्रं च वनायत्तमविज्ञाने द्वाश्रयम् ।

मुखं समग्रं विज्ञाने विमले च प्रतिष्ठितम् ॥ च. सू. ३०, ४८)

"All suffering, with its resort in the body as well as in the mind has for its basis ignorance, while all happiness has its foundation in pure scientific knowledge.

CHAPTER V

AGNIVESA

The great heritage of the healing art left to us by Kṛṣṇa Ātreya would have been lost to us but for the herculean task of his chief pupil Agniveśa who made a detailed record of the exposition which flowed from the benevolent lips of his preceptor Ātreya. It was Agniveśa who codified the knowledge and arranged it in the form of a Treatise (तन्त्र) which forms the basis of what is now the Caraka Samhitā. Kṛṣṇa Ātreya expounded the science of Kāya-Cikitsa (कायचिकित्सा) to his six pupils among whom Agniveśa was one of outstanding intelligence. His intellect was superior to his co-students and his treatise was applauded by the sages as the most authoritative.

अथ मैत्रीपरः पुण्यमायुर्वेदं पुनर्वसुः ।

शिष्येभ्यो दत्त्वान् षड्भ्यः सर्वभूतानुक्म्पया ॥

अग्निवेशश्च भेलश्च जलूकर्णः पराशरः ।

हारीतः क्षारपाणिश्च जगृहुस्तन्मुनेर्वचः ॥ च. सू. १, ३०-३१

सक्तवः, कुपेष्टशिष्याय क्षतक्षीणचिकित्सिते ।

तत्त्वार्थविद्वीता जस्तमोक्षोः पुनर्वसुः ॥ च. वि. ११. १७

तपःस्वाध्यायनिरतानाग्नेयः शिष्यसत्तमान् ।

षड्भ्योऽप्यनुज्ञानुक्त्वान् परिचोदयन् ॥ च. सू. २२. ३

तुद्भेर्विशेषस्तत्रासीन्निषेधश्चातुरं मुनेः ।

तन्त्रस्य कर्ता प्रथममग्निवेशो यतोऽभवत् ॥ च. सू. १, ६२

"Thereafter Punarvasu, the most benevolent, moved by compassion for all creatures, bestowed the science of life on his six disciples. Agniveśa, Bhela, Jatūkarna, Parāśara, Hārta and Kṣārapāni received the teaching of that sage.

All this has been declared to the foremost disciple by Punarvasu, the Knower of Truth, who was free from the faults of passion and ignorance, in this discourse on the treatment of Pectoral Lesions and Cachexia.

Addressing himself to the six choicest of his disciples headed by Agniveśa, who were dedicated to study and meditation, the master, Ātreya, declared as follows, with a view to stimulate inquiry.

It was the excellence of his own understanding and not any difference in instruction by the sage, whereby Agniveśa became the foremost compiler of the science.

Not only was he the most brilliant among the disciples but his compilation received the approval of the committee of experts which declared it to be the best of all and ever since it became the authoritative text-book on the science."

This brilliant author of perhaps the oldest written medical work was known as Hutāśa (हुताश) or Hutāśaveśa (हुताशवेश) and Vahniveśa (वह्निवेश). Hutāśa (हुताश) and Vahni (वह्नि) are but the synonyms of Agni (अग्नि) and the later authors substituted the synonyms for the purpose of variation. In साधवनिदान chapter 44 on fractures we find:

अग्नें समासाद् द्विविधं हुताशः ।

श्रीकण्ठदत्तव्याख्या-हुताश इति अग्निवेशसंबोधनम्, चरके हुताशशब्देन अग्निवेशोऽभिधीयते ।
Agniveśa is referred to by his synonyms in Caraka Samhitā.

In Siddhisthāna (सिद्धिस्थान) 12th chap. verse 53 Agniveśa is referred to as Vahniveśa (वह्निवेश).

चिकित्सा वह्निवेशस्य स्वस्थानुरहितं प्रति ।

The Commentator Cakrapāni while beginning the benedictory verse (मङ्गलचरण) refers to Agniveśa by his synonym.

हुताग्निवेशचरकप्रवृत्तिभ्यो नमो नमः ।

The Agniveśa-tantra originally consisted of 12000 verses.

यस्य ह्यग्निवेशहृत्प्री हृदि तिष्ठति संहिता ।

ऐश्वर्यः नदिकारुद्रकिंतिस्माकुलकश्च सः ॥ ५२ ॥

रंगाल्लेखं चित्तिमा च स किमर्थं न बुध्यते ।

चिकित्सा बहिर्वेगस्य स्वस्थानुरहितं प्रति ॥ ५२१ च. सि. १२

Unfortunately Agniveśa-tantra in the original form is not available at present. That logically leads us to the question, as to the period till which the book was available.

Indukara (इन्दुकर, the commentator of Aṣṭāṅga Sangraha writes 'चरकोऽर्थकृते तन्त्रे ब्रह्मसूय दत्तो गतः ; this statement has led many to believe that Caraka's life came to an end before he could complete the redaction of Agniveśa-tantra. But this theory is untenable, because throughout the Caraka Saṃhitā we find at the end of each chapter चरकप्रति-संस्कृते; this means that Caraka redacted the whole of Agniveśa-tantra.

The following statement of Dṛḍhabala has led some people to think that Agniveśa-tantra was not available in his time.

कृत्वा बहुभ्यस्तन्त्रेभ्यो विशेषोऽच्छिलोच्चयम् ।

च. सि. १२-३९

अस्मिन् एष इशाध्यायाः कल्पाः सिद्धय एव च ।

नास्मिन्तेऽग्निवेशस्य तन्त्रे चरकसंस्कृते ॥

च. चि. ३०-२८९

"He added seventeen chapters in the section on therapeutics as also the two sections of Pharmaceutics (कर्म) and Success in Treatment (सिद्धि) in entirety, by culling his data from various treatises on the science".

"The seventeen chapters and the sections on Pharmaceutics and Success in Treatment in the treatise composed by Agniveśa and revised by Caraka have not been found."

But such an assumption can be easily set aside. The argument put forward is that he mentions having taken from many other books, and Agniveśa-tantra is not specifically mentioned. But we must not forget that Dṛḍhabala is a redactor. As we have seen, redaction is the progressive revision of the original text. Additions or omissions can be made according to the progress in the science made

during that period. Naturally the author has to consult all new books for such redaction. He has to move with the times and be in constant touch with the changing. He was not a mere commentator who had just to make the text lucid. He was a redactor and as such he consulted all available treatises in order to revise and make the text up-to-date. The basic text which was to be redacted need not be mentioned as such as it is to be taken for granted as the basic text on which the super-structure was constructed.

Again, the verse quoted above means no more than this that the redacted portion of Caraka is not available and it is only by a stretch of unwarranted assumption that we can construe it as meaning that Agniveśa-tantra was not available. A slight linguistic ambiguity in the verse has however, caused this confusion. If the reading were चरकसिद्धिस्तथा: the ambiguity would not have occurred.

In the Siddhi-sthāna (सिद्धिस्थान) 4th chapter, Dr̥ḍhabala (द्रुढबल) describes the meeting of the learned sages under the presidentship of Ātreya. Unless we take this to be a mere conventional way of writing in those days, we must conclude that Agniveśa-tantra (अग्निवेश-तन्त्र) was available in Dr̥ḍhabala's time.

There is difference of opinion as regards the portion of section on therapeutics, that have been restored by Dr̥ḍhabala. This creates a problem as to which 17 chapters were restored by Dr̥ḍhabala. A critical examination of this question by thrashing out all available internal and external evidence indicates that the original text of Agniveśa existed as the basic text for Dr̥ḍhabala and that a certain portion of the *redacted* text of Caraka was not available.

The style and language of the original texts of Agniveśa, Caraka and Dr̥ḍhabala can be distinguished on minute examination of the text. Now, we find that there is a mixture of the styles and diction in nearly all the chapters and hence one is led to the natural conclusion that Agniveśa-tantra did exist in the time of Dr̥ḍhabala.

The index of all the 120 chapters is given in the 30th chapter of Sūtra-sthāna. Dr̥ḍhabala's arrangement is quite in accord

during that period. Naturally the author has to consult all new books for such redaction. He has to move with the times and be in constant touch with the changing. He was not a mere commentator who had just to make the text lucid. He was a redactor and as such he consulted all available treatises in order to revise and make the text up-to-date. The basic text which was to be redacted need not be mentioned as such as it is to be taken for granted as the basic text on which the super-structure was constructed.

Again, the verse quoted above means no more than this that the redacted portion of Caraka is not available and it is only by a stretch of unwarranted assumption that we can construe it as meaning that Agniveśa-tantra was not available. A slight linguistic ambiguity in the verse has however, caused this confusion. If the reading were चरकसिद्धिस्तथा: the ambiguity would not have occurred.

In the Siddhi-sthāna (सिद्धिस्थान) 4th chapter, Dr̥ḍhabala (द्रुढबल) describes the meeting of the learned sages under the presidentship of Ātreya. Unless we take this to be a mere conventional way of writing in those days, we must conclude that Agniveśa-tantra (अग्निवेश-तन्त्र) was available in Dr̥ḍhabala's time.

There is difference of opinion as regards the portion of section on therapeutics, that have been restored by Dr̥ḍhabala. This creates a problem as to which 17 chapters were restored by Dr̥ḍhabala. A critical examination of this question by thrashing out all available internal and external evidence indicates that the original text of Agniveśa existed as the basic text for Dr̥ḍhabala and that a certain portion of the *redacted* text of Caraka was not available.

The style and language of the original texts of Agniveśa, Caraka and Dr̥ḍhabala can be distinguished on minute examination of the text. Now, we find that there is a mixture of the styles and diction in nearly all the chapters and hence one is led to the natural conclusion that Agniveśa-tantra did exist in the time of Dr̥ḍhabala.

The index of all the 120 chapters is given in the 30th chapter of Sūtra-sthāna. Dr̥ḍhabala's arrangement is quite in accord

मलाच्च ज्वोष्मा धातून्वा स शीघ्रं क्षपयेत्ततः ।
 सर्वाकारं रसादीनां शुद्धयश्चुद्धयपि वा क्रमत् ॥
 प्रायोऽनुयाति मर्यादां मोक्षाय च वशाय च ॥

Tisata (तीसटा), son of Vāgbhaṭa in his Cikitsā-Kalikā (चिकित्साकलिका) mentions Agniveśa as a distinct authority showing that Agniveśa-tantra existed in his time.

हारीतमुद्युतपराशरभोजभेल-
 भुवम्रवेशचरकादिविक्रित्सकेकैः ॥ चि. क. छे-२

Cakrapāṇi, the commentator of Caraka Saṃhitā, who flourished in the 11th century A. D. cites pharmaceutical preparations which are not found in the Caraka Saṃhitā. This leads us to the conclusion that the original Agniveśa-tantra was available even in the time of Cakrapāṇi.

काथ्यं द्रव्याजलि धुणं प्रययिवा जल उकं ।
 पार्श्वेपेग तेनाथ दवागुरुपकल्पयेत् ॥
 कर्षाणि वा कणाद्युष्टयोः कल्कद्रव्यस्य वा पलम् ।
 द्वितीय पाचयेद्युक्त्या वारिप्रस्थेन चापराम् ॥

च. बि. २. १७९-टीका

कर्षपूर्णस्य कल्कस्य गुडिधानां स सर्वशः ।
 मात्रा क्षौद्रघृतादीनां काथस्नेहेषु चूर्णयेत् ॥

च. बि. ४. ७२-टीका

पटोलमूलं त्रिफला विबाला च पलोन्मिता ।
 पलायं त्रायमाणा च तथा कटुकरोहिणी ॥
 कर्षाणि नागरं दत्त्वा पटुपलाभ्यश्चूर्णयेत् ।
 जले शृतं पिबेत् कोष्णं चूर्णस्माच्च पलं पलम् ॥

च. बि. ७-६२-टीका

The following recipe of Vāsādyā-Ghṛtam (वासद्य-घृतम्) is quoted by Sōḍhala (शोडल) from Agniveśa-tantra.

समूलपत्रशाखस्य तुलां कुर्वाद् घृष्य च ।
 जलद्रोणे विपञ्चयेत् अष्टमागावोपितम् ॥
 बल्केन घृष्यपुष्पाणां आजकं सर्पिषः पचेत् ।
 सत्सिद्धं पाययेद्युक्त्या पार्श्वेपेपुना पुनम् ॥
 काथं काष्ठं प्रतिद्वयं तु तृतीयं कृच्छुष्यम् ।
 रक्षेपितं क्षये केव विषं सर्पिर्निपञ्चयेत् ॥

Śodhala flourished in the 12th Century A. D. and this shows that Agniveśa-tantra was available even then.

Kaṇṭhadatta (कण्ठदत्त) the commentator on Vṛnda's Siddhayoga (वृन्द-सिद्धयोग) who flourished in the 13th century A. D. says:

तथा च अग्निवेशः—

प्रवेदमाने ज्वरिते क्षीते हृष्टतमूहे ।

कटयूखजङ्घाश्चस्थिराङ्गिने स्वेदनं हितम् ॥

सौम्यं सूत्राङ्गद्वये प्रवर्तयति मातृम् ।

सन्धिरिपतांततो दोषाङ्गमार्वीकुर्वते मृगम् ॥

जलमृततृणमग्निघोषेनोक्तम्—

विष्टब्धपटुमुर्धाक्षमाध्मातोदरमेहनम् ।

विश्राज्जलमृतं जन्तुं क्षीतपादकराननम् ॥

These verses are also not found in the Caraka Saṃhitā and hence it can be presumed that they have been taken directly from the Agniveśa-tantra itself.

Śivadāsa Sen who flourished in the 15th century A. D. says in his Tattva-candrikā (तत्त्वचन्द्रिका)

तदाह अग्निवेशः—

काष्ठयमानं तु यत्तोयं निष्फेनं निर्मलीकृतम् ।

भवत्यथविशिष्टं च तदुष्णोदकमुच्यते ॥

As this verse is not found in the Caraka Saṃhitā, the only possible source of it must be Agniveśa-tantra which must have been available in the fifteenth century. After that period no more citations from the Agniveśa-tantra are available except one suggestive reference by Gaṅgādhara Śāstri in the 19th century.

अस्मिन् सप्तदशाध्यायाः कल्पाः सिद्धय एव च ।

नासाद्यन्तेऽग्निवेशस्य तन्त्रे चरकसंस्कृते ॥

च. वि. ३०-३८९

गंगाधरः—चरकप्रतिसंस्कृतेऽग्निवेशतन्त्रेऽधुना न प्राप्यन्ते, केवलाग्निवेशतन्त्रे तु प्राप्यन्ते ।

अतः परमग्निवेशकृततन्त्रस्य नाधुना ।

चरकप्रतिसंस्कारः प्राप्यते कापि चेष्टया ।

तस्मात् कार्या पृथगेऽसन् बह्वलः कृतिः ।

शिवमाराध्य यत्नेन प्रसादं प्राप्य शूचिनः ।

उद्दिष्टानुक्रमेणैव प्रतिसंस्कृतवान् पुनः ।

तमेवाग्निवेशान्त्रं सिद्धिस्थानान्तमेव च ॥

च. वि. १४-२ गंगाधर टीका

More references will be unearthed by scholars in the course of research.

Besides this premier work on Ayurveda, several other works are ascribed to Agniveśa. *Añjana-Nidāna* (अञ्जननिदान), a treatise on diseases of the eye is one such book.

अथोद्यतिमिरच्छन्तचक्षुषां मीपजां कृते ।

सूक्ष्मं करोत्यग्निवेशग्रन्थमञ्जननाल्यया ॥

Girindranāth Hist. Vol III Pages 525-526

इत्यग्निवेशकृतमञ्जनविदागारख्यं सम्पूर्णम् ।

This closing sentence definitely ascribes the work to Agniveśa. He is also quoted by Vāgbhaṭa, Bhāvamīśra, Tisāṭa and Rūdrabhalla and other authors. There are two or three commentaries written on this book.

A third work *Nidāna-sthāna* (pathology) also stands in the name of Agniveśa.

Dowson speaks of Agniveśa as a sage and son of Agnī and an early writer on medicine. We learn that Bharadwāja and Agastya were his preceptors in archery (*Dhanurvidyā* धनुर्विद्या) and that Bharadwāja gave him the *Āgneyāstra* which Agniveśa gave to his pupil Drona (द्रोण). This *Astra* was called *Brahmaśīrah* (ब्रह्मशिरः).

Thus we find that Agniveśa was equally adept in the science of war as with that of medicine.

One Agniveśa, the son of Satyaka (सत्यक) is mentioned in *Majjhima Nikāya* (मज्झिम निकाय) to have taken part in the philosophical debate with Gautama Buddha.

There is no need to go into elaborate argument over the question of period in which he flourished. He was the pupil of Ātreya and hence he

flourished during the period of Ātreya i. e. during the Śatapatha (सतपथ) period. We may briefly enumerate the points that support our placing him in the Śatapatha period, apart from the argument of his contemporaneity with Ātreya.

(1) He must have flourished before Pāṇini as we find references to Taxilla in Pāṇini while Taxilla is conspicuous by its absence in Agniveśa Samhitā. No author of the versatility of Agniveśa could afford to neglect mentioning Taxilla if it were a flourishing centre of medical learning in his time.

(2) In the Pāṇini-Sūtra ४-१-१-२, Jatūkarna, Parāśara and Agniveśa—all names of physicians occur together and this indicates that Agniveśa lived before Pāṇini's period. We know that Jatūkarna and Parāśara were co-students (सतीर्थ) of Agniveśa.

(3) Hemādri-lakṣaṇa-prakāśa (हेमद्रिलक्षणप्रकाश से. १५२५) quotes from Śālihotra (शालिहोत्र) a list of Āyurvedic authors. In it Agniveśa, Hārīta, Kṣārapāṇi and Jatūkarna are mentioned. We know all these were co-students.

(4) In Śatapatha Brāhmaṇa (सतपथब्राह्मण) we find this:—अग्निवेशादग्निवेशः। Here a descendant of Agniveśa is referred to.

To Bharadvāja we pay our homage as the first mortal who undertook the hazardous task of travelling to the abode of Indra and bringing to the mortal world the science of Āyurveda. We regard Ātreya with reverence as the first systematic propounder of the science of healing. Caraka is illustrious as the redactor of the original tantra of Agniveśa. But amidst these we must not forget the one who gave the science its permanent impress, by reducing it to the systematic form which it possesses today and which was heartily applauded as the best by his contemporary sages and scholars. It was Agniveśa, the most brilliant pupil of Ātreya who took down the truths as they flowed from the sacred lips of his master. Other pupils followed suit, but it was Agniveśa, who was upheld as the best. Thus it was Agniveśa who like Bhagīratha, brought the heavenly Ganges of the healing art within the reach of suffering mankind. He is the golden link between the preachings of Ātreya, and the expositions of later medical authors. It is the anchor sheet

and the permanent fountain source of medical science from which all the later scholars have drawn nourishment and support.

CHAPTER VI

CARAKA

The world knows the most ancient and fundamental book on the Medicine of India as 'Caraka', or the 'Caraka Samhitā'. The early Arabic writers on medicine refer to Caraka as an authority and a complete translation was made of Caraka in Arabic. "This book was translated into Arabic for the princes of the house of Barmicides" (Alberuni's India B. E. C. Sachan). Tibetan, Chinese and other languages obtaining in the northwest neighbourhood of India may contain either translations of or references to Caraka. One such reference to a Caraka, the court physician of Kaniska, in the Chinese Tripiṭaka, led the orientalist Sylvain Levi to infer that the author of the Caraka Samhitā is identical with the court physician of Kaniska. Of this we shall have to say more later on in this chapter. The name of Caraka as we shall see has been used in the ancient sacred literature of India to mean the adherents of a branch of the Veda, the teacher of a kind of acrobatic dance, a glutton and so forth, varying in its application of the particular sense of the verb 'Car' (च) out of the many it connotes.

It seems to be an honorific term indicating the profession of the peripatetic teacher. The religious and philosophical teachers called themselves the 'Parivrājakas' (परिव्राजक). Mostly these were men who had renounced the world and had entered upon the last stage of religious life, that is 'Samnyāsa' (संन्यास).

Throughout the many centuries since first the Agniveśatantra was studied and redacted by Caraka, the world has known of this great work as the Caraka Samhitā. From the fourth century after Christ till the present day, scholars, commentators, translators and institutions have added to the sanctity and authority of this name. Bhaṭṭāra Haricandra and Jejjāta named their commentaries after his name. They are known respectively as Caraka-vyākhyā (चरकव्याख्या) and Caraka-nyāsa (चरकन्यास). In the seventh century the great

sanskrit prose writer Bhaṭṭa Bhaṭṭa (भट्ट) mentions Caraka in one of his passages containing 'double entendre'.

Sānti-rakṣita refers to Caraka in relation to 'yukti' (युक्ति) or co-ordination as one of the Pramāṇas (प्रमाण) or means of knowledge.

अस्मिन् नति भवत्येव न भवत्यवतीति च ।
यस्मादगो भवत्येव युक्तिरपानिधीयते ।
प्रमाणान्तरमेवेत्येत्याह चरको मुनिः ।
नानुमानमियं यस्मादष्टाष्टौ न विद्यते ॥ इति ।
नान्तरिक्षितयुक्त्यान्वयप्रमाणविचारे चरकमतम् .

During the seventh, eighth and the ninth centuries when Arabic scholarship was at its highest and Islam spread in the west till it reached the shores of the Atlantic, Caraka was a revered authority in the Saracen and Latin world of science and scholarship. Alberuni says "they (the Hindus) have a book called by the name of its author, i. e. Caraka. which they consider as the best of their whole literature on medicine. According to their belief Caraka was a Rṣi in the last Dwāpara-yuga when his name was Agniveśa, but afterwards he was called Caraka i. e. the intelligent one" (Alberuni's India by E. C. Sachan). Jayanta Bhaṭṭa in his work on logic called Nyāya-mañjari (न्यायमञ्जरी) refers to Caraka as an example of those authoritative wise men who have the whole of time space in their ken.

प्रत्यहं कृतदेशकाऽपुनश्च ज्ञानेदानुमारीसमस्तस्यस्तपदायैव किमिदं न चरकादयः इति

जयन्तभट्ट—न्यायमञ्जरी

Cakrapāṇi, the popular commentator on Caraka of the 11th century is well known. Bhānumati, the commentary on Susrūta refers to Caraka too during the same period. Vijaya-rakṣita and Śrīkaṇṭha of the 13th century, Vācaspati and Kaṇṭhadatta and Śivadāsa of the 14th and 15th centuries respectively as well as Bhāvanīśra of the 16th century refer to Caraka as the great medical authority. In the twentieth century there is a club of medical scholars in America, named after Caraka. It is known as the Caraka Club of America. Thus throughout these twenty or more centuries after he edited his great work, his name has been held in high esteem and as the highest authority on Hindu medicine.

We shall now discuss the history of the word 'Caraka' as it has been used to denote many and various individuals or schools of thought.

The secular equivalent to this term was perhaps used to distinguish the secular peripatetic teacher from the religious Saṁnyāsi and the equivalent of Parivrājaka is probably 'Caraka'. Śaṅkara, Rāmānuja, Mādhyama and innumerable such peripatetic religious teachers were known as Parivrājakācāryas (परिव्रजार्च्य). Similarly the teacher of the secular wisdom, particularly of medicine, who went about disseminating his skill and theories must have called himself Caraka. It is necessary to examine why there should have come into being any school of peripatetic teachers either religious or secular. This happens, as it is easy to see, when a new school has come into being, or when an old school is trying to reassert itself against the claims of a new one; at any rate, when there is a need felt for either the establishment of new tenets or the re-establishment of old ones, refuting the opposing or a newer school of thought. We have the example of the black school of Yajurveda whose adherents or propagating section were known as Carakas. That was because this black or the older school had to meet the challenge of a new school started and propagated by a schismatic section of the followers of Yājñavalkya who broke away from the old school and founded his own branch known as the white Yajurveda. The older school must have felt the need to re-establish its authority or defend its following against the inroads of the new and hence went about the country intent on the preservation and dissemination of its doctrine.

It is probable that there arose a like situation of great ferment in medical thought and practice either as the result of various schools of medical theories coming into being or of a confusion regarding the rival schools claiming to represent the ancient and authoritative tradition or even perhaps of the wealth of accumulated data of experience and experiment waiting to be properly blended with and incorporated into the original body of the ancient science. That each or every one of these conditions is entirely probable is obvious when we remember that between the original compilation of the Agniveda-tantra which was presented to the assembly of sages

and approved by them unanimously and the appearance of the redactor whom we know as Caraka, there must have elapsed a long period of time, not less than a few centuries. If we regard Ātreya and Agniveśa as belonging to the eighth or seventh century B. C. at the latest they are succeeded immediately by the Buddhists to whom medical aid and teaching was an important part of their mission of compassion to the fellow-men. The later day Buddhism of Aśoka was a state-religion and spread out broad and wide all over the central and south eastern parts of the continent of Asia, carrying the message and gift of healing along with the spiritual tenets of the 'Light of Asia'. With State support, medicine was elaborately organized into institutional forms such as hospitals for man and animal. The universities of Taxilla and Nālandā and the innumerable hospitals for men and animals, that history has recorded for the first time on such an imperial scale owed their origin to the efforts and enlightenment of the Buddhist state of the Aśokan and post-Aśokan periods. The immense wealth of clinical data gathered and the variety of theories that such world-wide organization and contact should have engendered, required a fitting blending and incorporation with the ancient foundations of the sages.

Besides, it must be borne in mind that the centuries succeeding the Nirvāṇa (निर्वाण) of the Buddha were also the centuries of great and increasing ferment in India's secular as well as metaphysical thought. With the fall of Nandas and the ascent of Candragupta Maurya to the imperial throne of Magadha and the presence of and threatening incursions into the interior by the Greek Viceroy left behind by Alexander in the north-west of India, the sense of political, national and economic solidarity of India as a people was born. There arose too political theorists like Cāṇakya expounding the science of government and of finance. In religion, astronomy and medicine, contact with the Greeks and the Persians in the west and the Chinese in the east created the need and urge for reasserting the time honoured traditions of thought and practice of the land. The rise and spread of Buddhism among the masses provoked the upsurge and renaissance of the Vedic traditions of worship and thought. Subsequent to Aśoka, Buddhism waned in India as a spiritual and political power and Vedic tradition reclaimed the people to its fold and by a *comp d'etat*

seized even political supremacy when Puṣya-mitra, the commander-in-chief, usurped the throne of Magadha by assassinating his ruler belonging to the Buddhistic persuasion. This was the culmination of the Vedic reassertion and Puṣya-mitra performed the horse sacrifice after the manner of ancient Hindu emperors, and proclaimed himself the champion and renovator of Vedic traditions.

It is to this period, we presume, the various systems of Indian philosophical thought owe their origin. Similarly it is in this period that the codification and edition and re-organization of the medical thought and traditions of the land, took place based on the experience and accumulated data of the whole period between the time of the sage-promulgators like Ātreya and Agniyeśa and the time of this new ferment and revival when Buddhism was on the wane.

Carakā, as we may gather from the internal evidence of the work, is aware of the Śakas, Yavanas and the Cīnās.

बाह्यिकाः पद्मवाचीनाः शूनीका यवनाः शकाः ।

सांसर्गोद्धमसाध्वीकशस्त्रवैश्वानरोचिताः ॥ ३१६ ॥

च. वि. ३०

He knows their habits and dietetic peculiarities. During the days of the Magadha empire, India loomed large among the nations of the world. Her wealth, her arts and sciences received international admiration. Conquerors, adventurers, Savants and pilgrims turned their eyes towards India in quest of her wealth, knowledge and holiness. The philosophers of the Nyāya and Vaiśeṣika schools expounded their theories of reality, of substance and quality. The Sāṅkhyas formulated their theory of evolution of the world by the interaction of matter and consciousness (Prakṛti प्रकृति and Puruṣa पुरुष) and established the scientific postulate on which positive sciences could be built.

The popular religion still retained the devotion to Vedic gods and rites and the Atharvavedic rituals e. g. Śāntipañṣṭika, Balli, Maṅgala and Homa are prescribed in the Carakā Saṁhitā as aids to somatic medicine. All these circumstances point persuasively to a time when there was a ferment and upsurge of ancient Vedic thought and

ritual and when India was the meeting ground of the world's peoples and their thought. It is to such a period, that we are inclined to hold Caraka, the redactor belongs, i e. about the second century B. C.

It is not possible to know with any degree of precision who Caraka was or his parentage, when and where he lived and redacted the work, whether this was the personal name of the author or of a school to which he belonged or a title he assumed for himself or which was conferred on him by his contemporaries. With the field thus open for the exercise of fertile fancy, several theories have become current regarding the identity and the time of this famous redactor. Before we examine any of these, it is necessary to remember that the book itself affords no clue to the nature and time or other circumstances of the redactor. There is just a bare mention of his name in the colophon of each chapter as the redactor of the treatise compiled by Agniveśa.

इत्यग्निवेशकृते तन्त्रे चरकप्रतिसंस्कृते ।

Whether even this colophon is the original feature of his work or appended to it by the later redactor Dyḍhabala who claims to have completed the work by reconstructing and restoring the last forty-one chapters of the treatise ascribed to Agniveśa, is also a matter for conjecture. Before we can formulate any views regarding the person and time of Caraka, let us consider why any person, be he known as Caraka or by any other name, should have felt called upon to redact a work like the tantra of Agniveśa which had received the commendation of the great sages as the best embodiment of Ātreya's teaching. It would be interesting and throw new light on the subject if we could have the Agniveśa-tantra as it was before being redacted by Caraka.

The Bhela and Hārīta tantras, which were written at the same time by the co-students of Agniveśa, are still available but the tantra of Agniveśa is unfortunately not available now. We have to be satisfied only with its redacted form—Caraka-Saṃhitā.

It seems to us natural to suppose that in addition to the progressive accumulation of material demanding to be sifted and incorporated,

a work held in great repute and coming down through the centuries must have been found to have suffered mutilations and spurious amendations and interpolations. Thus the need for verification and reconstruction in the light of the parallel compilations and texts that survived in greater compactness, must have arisen. With the appearance, at such a time, of a great scholar with comprehensive vision and learning, the need was fulfilled and we shall not be wrong in holding that after the lapse of a few centuries after the compilation by Agniveśa, there arose a need such as we have envisaged above, and a scholar-physician whom we know as Caraka was born to fulfil this great need. Not having any definite indications as to his time, we do not know what length of time again elapsed between him and Dṛḍhabala, the second redactor who claims to have restored the lost portions of Agniveśa-tantra as redacted by Caraka, the same having been lost. That even this redacted version of Caraka should have been lost already at the time of Dṛḍhabala, makes one conclude that Caraka was quite ancient even at the time of Dṛḍhabala. The latter however never concerns himself regarding the time or identity of Caraka. Except giving him an epithet of Atibuddhi (अतिबुद्धि), the highly intelligent he never troubled himself to give us either his view of the Man or of his time or place.

अतस्तन्मोक्षमिदं चरकेणातिबुद्धिना ।

चरकतं तत्त्वसंपूर्णं त्रिभागोपलक्ष्यते ॥ (च. सि. १२, ३८)

We derive no help even from Vāgbhaṭa, who based his work on these two ancient compilations of Caraka and Suśruta. He only mentions that these two are preferred to the works of Bhela and other sages, by virtue of their excellence, and hence excellence and not the mere authorship of a Ṛṣi, is deemed the recommendation for a work.

अपिपणीते प्रीतिश्चेन्मुक्ता चरकमुद्युतो ।

मेडाभ्याः किं न पठ्यन्ते तस्माद्भाष्यं सुभाषितम् ॥

(अ. इ. उत्तर. ४०, ८८)

To help us to arrive at as definite a conclusion as possible we shall examine the theories current regarding Caraka's time and identity.

They are: (1) That Caraka is a R̥ṣi of the Pre-Pāṇini age; (2) that Caraka is Patañjali, the commentator on Pāṇini's grammar and also the author of the Yogasūtras; (3) that he is a sage born as the incarnation of Śeṣa, the serpent king and servant of Viṣṇu and (4) that he is the same as the court physician of the king Kaniṣka.

In this connection we cannot do better than cite the very erudite and elaborate argument advanced by the editor of the Kāśyapa Saṃhitā, the Nepal Rājguru Śrī Hemarāja Śarmā setting forth the pros and cons in each of these theories, as also a general inquiry into the meaning and usage of the word 'Caraka', in the ancient books.

As regards Caraka who is known as the redactor of the text of Agniveśa-saṃhitā containing the teaching of Ātreya Punarvasu, we find the word Caraka in several works used in various contexts. But it is not possible to determine from these references that there existed a teacher of medicine by that name or that a certain person among those referred to is the medical teacher.

We find in Bhāvaprakāśa the story of Caraka given thus in the history of medical teachers:—'Śeṣa, the king of serpents, who is versed in the Vedas and in the Āyurveda which is a sub-Vēda of the Atharvaveda, took his birth in the world as the son of a sage versed in the Vedas and the sciences and went about as a peripatetic teacher. Thus from word "cara" a perigrinator, he came to be known as Caraka, the last syllable being added without altering the sense. He took up the text of the teaching of Ātreya as codified by Agniveśa and redacted it and made it popular in the world. Thus is told the story of Caraka, the author of the work going by the name of Caraka-Saṃhitā.

Some are of opinion that the word 'Caraka' has the connotation of a physician and that there are a few usages of the word obtaining in that sense with reference to some individuals. If in the lexicons it were found that the word was given as a synonym for physician it should have been applied to Suśruta and others; but we do not find it. Therefore it is natural to conclude that it applies only to the author of the work in question. But if it is found applied to a few

other persons, it is to be regarded as a title applied to them like "Kali Bhima" or "modern Samson" or "modern Hippocrates" etc. The importance to Atharva-veda assigned in the Caraka-Samhitā like in Kāśyapa and Suśruta Samhitās, Atharva-veda being the source of Āyurveda, does not in any way go against the supposition that Caraka signifies the section (शाखा) of the Veda going by that name. It may also happen to be the author's Gotra (गोत्र) or clan name, even as "Ātreya" is one belonging to the clan of Atri. Or it may be his personal name too. Or can it be that, being a person born in western India where the Nāga race were living, he was called an incarnation of the serpent-god by the author of Bhāvaprakāśa. Or it is also probable that as Rudra, the commentator on the Bṛhajjātaka writes that any learned physician who went about as a mendicant from place to place was thus known as Caraka, the perigrinating mendicant. The Lalita Vistara also supports the usage of the this term.

वराहमिहिरः— बृहज्जातके प्रब्रज्यायोगदर्शने प्रब्रज्यायोगवर्णने "शक्या जीविकभिस्तु वरका निर्ग्रन्थवत्याशनाः ।

रुद्रव्याख्या—

वरका योगाभ्यासकुराला मुद्राधारिणश्चित्तानिपुणाः पाण्डुभेदाः" इति व्याख्यानं विहितमस्ति ।

ललित विस्तरे १ अध्याये—

"अन्य-तीर्थक-श्रमण-ब्राह्मण-वरक-परिव्राजकानाम्" इति श्रमणादिश्रेण्यां केषाञ्चित्चरणस्त्रीकानां तपोवृत्तीनां बोधकश्चरकशब्दो लभ्यते ।

Be it as it may, for in whatever way he may have become popular as Caraka, it is certain that by his erudition and skill in the science of Medicine, he had come to be regarded as a great teacher from the earliest times, for we find that even Vāgbhaṭa and others refer to him with respect as the "Preceptor Caraka" (वरकानाथ). Jayanta Bhaṭṭa too refers to him with great respect thus in his Nyāya Māñjari: "Caraka and others are the perceivers of the efficacy of substances in their combinations and singleness relative to the variations of climate, season, the individual characteristics and stage".

In this connection some scholars have propounded that Caraka

is anterior even to Pāṇini as in one of the Sūtras of the latter he refers to the name Caraka (चरकः ४-३-१०९). But the Caraka referred to in that Sūtra is prefixed by the word Kaṭha (कठ) and as it is with reference to the discussion of Carana Vyūha (चरणव्यूह), a vedic text, the person referred to must be a seer of the Vedic hymns or some ancient sage of his line of descent. The Caraka branch of the Samhitā is available in print now. In another Sūtra (5-1-144) of Pāṇini (मन्त्र-चरकस्योक्तं) the Caraka referred to is in connection with significance of the vedic intonation. It is more reasonable to conclude that the name is of the person of the Vedic line and not of the medical Caraka who must be of post-vedic time. Viśvarūpācārya in his commentary on the Yājñavalkya smṛti cites a passage like "thus say the Carakas" (इथा चरकाः पठन्ति). Though the context is entirely medical, for the passage is in connection with the knowledge of the Aśvinīs in the medical science and states that honey in exigencies may be considered not incompatible with Brahmacharya, yet as there is a citation of the Vājasaneyas or the followers of Sāma-veda in line with the Carakas, it is clear that Caraka here refers to the Caraka school of the Veda. According to the Kāśikā Vṛtti (काशिकावृत्ति another commentary on the Veda) Vaiśampāyana (a disciple of Vyāsa and the receiver of Yajurveda from him) was known as Caraka and his school of Veda as the Caraka school.

याज्ञवल्क्यटीका बालकीडा १-२-३२

तथा च चरकाः पठन्ति—क्षेतकेतुं हारिण्यं ब्रह्मवर्चं जग्राह। तमग्निना वृचतुः
मधुमासौ किल ते मेघज्यमिति।

स होवाच ब्रह्मवर्चमानी इमं मज्जशीयामिति। तौ होचतुः- यदा वात्मना पुरुषो जीवति
अथान्यत्पुण्यं करोत्यारमानं सर्वतो गोपायेत्। अथ खल्वहोर्वाजसनेयिनः इत्यादि

चरक इति वेदाभ्यासस्य व्याख्या, तदर्थं बन्धेन सर्वे तदन्ते वासिनश्चरका इत्युच्यन्ते।

(काशिकावृत्तिः ४-३-१०९)

In the white Yajurveda in the 30th Chapter 18th hymn in the context of human sacrifice (पुरुषमेव) there is found a chant saying to the wicked teacher Caraka: इष्टताय चरकाचार्यम्। Mr. Misra, who comments on this in Hindi, says that the teacher Caraka, referred to is the medical teacher Caraka. Some are of opinion that Caraka, on this basis, is a very ancient person. But what ground

is there to interpret that word to mean the name of a particular individual? Mahidhara (महीधर) interprets it as meaning the 'Guru of the Carakas' (चरकागुरुः) i. e. the followers of the Caraka school of Veda. But in the context in which the word is found, to think that the Caraka branch of the Veda is referred to, does not seem relevant. There is basis to think that there is reference in the passage in question to various persons belonging to particular classes and occupations for whom oblations are offered and not to the followers of any particular branch of Veda or to individual persons by name. In that very hymn are seen men of low character and gamblers and other wicked people offered oblations for the propitiation of similar evil gods. Therefore this Carakācārya who is given offerings in the name of one evil god should necessarily be a low and sinful person. The authors of the Jñānakośa' (ज्ञानकोश) are of the opinion that this word refers to the teacher of the Caraka school of Veda and that this context denotes a denunciation of the Caraka school. But in the 'Śatapatha Brāhmaṇa, though there are numerous occurrences of the word Caraka, the references are only to the peculiar usages of that branch and never any denunciation of it is meant. Even in the Taittiriya Brāhmaṇa there occurs the expression 'To the sinful Caraka' (दुष्कृत्य चरकायर्घ्यम्). There Sāyana interprets it as meaning the teacher of the art of walking on bamboo poles, a kind of dance-teacher. There is no reference to the teacher of the Caraka school of Veda. As any spirit of denunciation does not seem relevant to the usage of the word in the 'Taittiriya Samhitā' to which belongs the Caraka school itself, the interpretation offered by Sāyana seems to be applicable here too as meaning some person belonging to a low trade. In the same sense in which the word has been used in the Naisadhiya-carita (नैषधीय चरित), wherein Caraka is used to mean a spy, a secret walker, here too Carakācārya may mean the head of the spies. Then the relevancy of the context, the presence of the sinful man and the offering of things in the name of an evil god, all these agree completely. Dayananda Swāmī the author of a commentary on the Yajurveda interprets the word as meaning the teacher of the eaters or gluttons. This may be according to the meaning of the verb 'car' to eat.

Some scholars have held, on the basis of statements made

by Nāgeśa and Cakrapāṇidatta supported by Vijnānabhikṣu, Bhoja, Bhāvanīśra and others, that Caraka was identical with Patañjali, the author of the Vyākaraṇa Māhābhāṣya, the commentary on Pāṇini.

(१) चक्रपणिः—वरकप्रदितया आयुर्वेदरीपिकाभ्याख्यायाः प्रारम्भे—
पातञ्जलमहामाध्यचरकप्रतिसंस्कृतैः ।
मनोऽकावयोगाणां हर्षेऽद्वयतये नमः ॥

(२) चिन्तादिभिः योगवार्तिकारम्भे—
योगेन नित्यं यदेत वाचां लब्धं शरीरस्य च वैद्यकेन ।
योऽनकरोते प्रवर्गं मुनीनां पतञ्जलिं प्राञ्जलिरानतोऽस्मि ॥

(३) रानभद्ररीक्षितः पतञ्जलिचरिते—
नूत्राणि योगशास्त्रे वैद्यकशास्त्रे च वार्तिकानि ततः ।
कृत्वा पतञ्जलिमुक्तिः प्रचारयामास जगदिदं वातुम् ॥

(४) शोधः योगदर्शनवृत्त्यांरम्भे—
सम्प्रदातमनुशासनं विदधता पातञ्जलं कुर्वता
वृत्तिं राजनृपाङ्गसंज्ञकमपि व्यातन्वता वैद्यके ।
वाक् चेतो बहुषां मलः फणिभृतां भर्त्रेव येनोद्धतः ।
तस्य श्रीचरणाङ्गमल्लदृष्टेर्वाचो जयमयुज्ज्वलाः ॥

Patañjali has been regarded as contemporary of Puṣyamitra, who followed Aśoka as the ruler of Śāketa and who drove back the Greeks from India; and he has been placed about two centuries earlier than Vikrama era, i. e. 175 B. C. Bhandarkar also assigns him the same date after investigation into the Mahābhāṣya, the Purāṇas and historical records of western scholars. Thus if Caraka is inferred to be much earlier than 175 B. C. his identity with Patañjali can not be held to be valid. Again if on the basis of the Tripiṭaka he is taken to be so late as to be the contemporary of Kanīśka, there being a difference of more than two hundred years between the times of Puṣyamitra and Kanīśka, the identity of Caraka with Patañjali is still less probable. If the identity were true, what can be the reason for the non-mention of the name of Patañjali in the medical treatise going by the name of Caraka, while in both the works on Yoga and grammar, the authorship is explicitly in the name of Patañjali. In the commentary on grammar, the author explains his other name of Goṇardiya as meaning the citizen of the country

known as Gonarda which is explained in a Sūtra as the eastern country, which is the modern Gond according to Bhandarkar. There is another view regarding Gonarda that as in the ancient history of Kashmir there is mention of a king of Gonarda, the latter must be situated in Kashmir. If the commentator on grammar is a citizen of Gonarda and if he is identical with Caraka, why does he not mention the Gonarda region in his medical treatise? In the Caraka Saṃhitā there is mention of the regions of Pāncāla, Pāncanada and Kāmpilya but nowhere Gonarda. 'How could he forget to mention a synonym of his name even once? thus said the Gonardiya or Caraka the author of the Mahābhāṣya. Thus the enquiry into the subject of the time, name and place helps only to confirm the distinctness of these two persons. Patañjali's Mahābhāṣya is full of proverbial maxims, expositions in extenso and in brief, very varied in scope and difficult to grasp immediately.

But in the Caraka Saṃhitā, the parts whose redactorship is assigned to Caraka, though they contain passages of deep import are yet composed in an easily intelligible style which is delightful to read and understand and which is uniform in its structure and course. Thus from the point of view of style too, these two works show different authorship. Besides being an independent and original author, writing a new and comprehensive treatise on grammar and a foremost Sūtra-composition of a masterly type on the Yoga, how could Patañjali have found pleasure in the work of merely redacting the text of another's authorship, as it is in the case of the Caraka Saṃhitā.

As regards the view that Caraka was the the court physician to Kanīṣka, the theory originated from the French orientalist Sylvan Levi who discovered the name Caraka in the Chinese Tripiṭaka. Thus his identity and also his period which is the same as that of Kanīṣka, the 2nd century A. D., are according to Sylvan Levi established. If this theory be sound, both the identity and the period of Caraka are easily established as a contemporary of Kanīṣka who belongs to the 2nd century A. D. Most scholars hold this to be the probable period and identity of Caraka, with the material available at present. In this connection we may draw the attention of the reader to the

contrary view expressed by the late Sir P. C. Ray in his 'History of Hindu Chemistry'. We shall now concern ourselves with finding the time of Caraka within approximate limits. The task is not a light one, and it is one of the most abstruse questions of Indian chronology.

M. Sylvan Levi has recently unearthed from the Chinese Tripitaka the name of a physician named Caraka, who was attached as spiritual guide to the Indo-Scythian king Kaniska who reigned in the second century A. D. The French Orientalist would have this Caraka as the author of the famous Hindu medical work. Specially it would offer an easy explanation of the supposed Greek influence discernible in it.

We confess we are by no means convinced of M. Levi's theory. If we are to go by name alone, we can claim a still higher antiquity for our author. The appellation of Caraka occurs in Vedic literature as a patronymic; in short, Pāṇini felt it necessary to compose a special Sūtra for deriving the "Carakas" i. e., the followers of Caraka. Then again Patañjali, who is now generally admitted to have lived in the second century B. C., is known to have written a commentary on the medical work of Caraka, thus further proving the antiquity of our author, and both Cakrapāṇi and Bhoja agree in alluding to him as the redactor of Caraka. Indeed in such matters we would do well to set store by native traditions. It would be beside our purpose, however, to enter into any lengthy discussion on the grounds on which we are inclined to place Caraka in the pre-Buddhistic era. (History of Hindu Chemistry by Prafulla Chandra Ray Kt. Pages. 13-23.)

There are many adverse factors in conflict with the view that Caraka, the court physician to Kaniska was the author of the work under review, be he of the second century A. D. or the first century A. D. (the latter is the date 78 A. D. assigned by the Cambridge History of India. Vol. I. page 583). Kaniska's reign is associated with names like Nāgārjuna, Āśvaghoṣa and Vasumitra and the Buddhist influence was still predominant in the court. and Kaniska himself is reputed to have been a zealous follower of the Buddha. As a redactor, Caraka would have incorporated the spirit of the days or the

influence of his contemporary viz., the great expert in mercurial science Nāgārjuna, and the scholar, poet and mendicant Aśvaghōṣa. There is nothing in the internal evidence of the work to warrant the view that Caraka the author was a court physician to a Buddhist ruler like Kanīṣka. As his name indicates, he is more likely to have been a free and independent scholar, not under the patronage of any prince, a roaming scholar, teacher and healer. On the other hand there is some ground for believing that he was a physician popular in India, particularly in the north-west of India in the 2nd century B. C. The Parthian invader Mitrādates invaded and annexed the country between the Indus and the Jhelum i. e., the kingdom of Taxilla towards the close of his reign (171-136 B. C.—Smith's History of India). He was very much afraid of being poisoned by his enemies and he spent considerable time in the study of antidotes and toxicology. He is reputed to have had as his court physician a certain Crateuas who developed materia medica and was known as a wise author of important works. One wonders if this 'Crateuas' be an outlandish form given to 'Caraka' the author under review. It is a hazardous conjecture and until more evidence is available must remain so.

With these various views at our disposal, we should like to consider the greater probabilities of any of these, or of other circumstances implied in the material at our disposal. We should like to draw upon the internal evidence of the work itself in the absence of definite data from outside.

As the Nepal Rājguru rightly observes in his preface to the Kāsyapas'-saṃhitā, the non-mention of the names of the days of the week is a significant factor for assigning an ancient date to Caraka.

The concepts of Nyāya and Vaiśeṣika are yet rudimentary and in a fluid state and the categories of the Sāṅkhya had not grown into their theistic number of twenty-five as in the Mahābhārata. The Sāṅkhya of the most ancient form is represented in Caraka and if Caraka was either Patañjali, the author of the Yoga-sūtras or a post-Mahābhārata scholar, he would certainly have mentioned the twenty-fifth category of a supreme God, for the Sāṅkhya of

Patañjali holds Īśwara the original guide and teacher and lord of the universe of souls. There is no cult of devotion to a supreme ruler of the universe, nor is there mention of the incarnations of the deity and the names of the Purāṇic divinities. If Caraka belonged to a time when these forms of worship were current he could not have failed to incorporate them along with the Vedic rites of Bali, Homa and Maṅgala. The facts point to a time when Caraka must have existed, anterior to that the Indoscythian, Buddhist king, Kanīṣka, by which time the classical literature of Sanskrit based on the Purāṇic legends and anecdotes was fully established in India. Since the time of the original Caraka, the redactor of Angiveśa-tantra, the foremost in the medical profession, might have been conferred the title of 'Caraka'. This would explain the Caraka of the court of Kanīṣka.

The theory of Caraka being Patañjali, the latter only the author of the commentary on grammar or of the Yoga-sūtras or of both, is based on the misunderstanding of the verses of praise of Śeṣa the Serpent-God composed by Bhoja, Vijñānabhikṣu and others. Vijñānabhikṣu makes obeisance to Patañjali for coming down to the mortal world in human form and purifying the mind by Yoga science, and by the science of grammar human speech, and the body by the science of medicine.

योगेन वित्तस्य पदेन वाचो मलं शरीरस्य च वैद्यकेन ।

योऽप्यकरोत् प्रवरं सुतीर्णं पतञ्जलिं प्राञ्जलिश्रमतोऽस्मि ॥

विज्ञानभिक्षुः योगवार्तिकारम्भे

Cakrapāṇi in his commentary on Caraka begins by making salutation to the snake-king whom he identifies with Patañjali and Caraka.

पातञ्जलमहाभाष्यचरकप्रतिचिह्नितैः ।

मनोवाक्यदोषाणां हर्षेऽदिपतये नमः ॥

This is because there is a tradition that Patañjali also made a compilation of the medical texts. In the Patañjali-carita by Rama

Bhadra Dikṣit, reference is made to such medical authorship of Patañjali.

सूत्राणि योगशास्त्रे वैद्यकशास्त्रे च वार्तिष्ठानि ततः ।

कृत्वा पत्रलिमुनिः प्रचारयामास जगदिदं ब्राह्मणम् ॥

नागेशभट्टः—पत्रलिचरिते

Nāgeśa Bhaṭṭa also is of the same opinion, for when giving the definition of Āpta, he quotes the passages from Caraka and says 'thus spake Patañjali in the Caraka Saṃhitā,' taking Caraka to be identical with Patañjali.

नागेशभट्टः— व्याकरणमंजूषायां आत्मलक्षणकथनावसरे इति चरके पत्रलि :

Bhāvamīśra who must have been acquainted with the tradition of identifying the authors of the Yoga-sūtras and the Mahābhāṣya on Pāṇini and of Āyurveda with the serpent-god Śeṣa, gives the following account of the 'birth of Śeṣa in the mortal world as a peripatetic medical teacher.

“यदा मत्स्यावतारेण हरिणा वेद उद्धृतः ।
तदा शेषश्च तत्रैव वेदं साङ्गमवाप्तवान् ॥
अथर्वान्तर्गतं सम्यग्बुद्धेर्दत्तं लब्धवान् ।
एकदा स महीशृङ्गं शृङ्गं चर इवागतः ॥
तत्र लोकान् गदग्रेस्तान् व्यथय्य परिपीडितान् ।
स्थलेषु बहुषु व्यग्रान् म्रियमाणान् दृष्टवान् ॥
तान् दृष्ट्वातिदयायुक्तस्तेषां दुःखेन दुःखितः ।
अतन्तश्चिन्तयामास रोगोपशमकारणम् ॥
सन्निभस्य स स्वयं तत्र मुनेः पुत्रो बभूव ह ।
प्रसिद्धस्य विशुद्धस्य वेदवेदाङ्गवेदिनः ॥
यतश्चर इवायाजो न ज्ञातः केनचिद् यतः ।
तस्माच्चरकनाम्नाऽसौ विख्यातः क्षितिमण्डले ॥
स भाति चरकान्, यथैवेदाचार्यो यथा दिवि ।
सहस्रवदनस्यांशो येन ध्वंसो रुज्जं कृतः ॥
आत्रेयस्य मुनेः शिष्या अत्रिनेशादयोऽभवन् ।
मुनयो बहवस्तैश्च कृतं तत्रैव स्वकं स्वकम् ॥
तेषां तन्त्राण्य संस्कृत्य समाहृत्य विपश्चिताः ।

चरकं ज्ञात्मानो नाम्ना ग्रन्थोऽयं चरकः कृतः॥”

(भाव प्रकाश १ अ.)

Swāmi Kumāra identifies Caraka with the authors of the Mahābhāṣya and the Yoga-sūtras. In his commentary on Caraka he says:

स्वामिकुमारः चरकपेज्जिह्वाटीकाप्रारम्भे—

चाचो व्याकरणेन बुद्धिमकरोद् योगेन चित्तस्य यः ।

नै इन्द्रे चरकं हिताय जगतां व्याख्यातवैद्यागमम् ॥

From this story it is clear that the name of Caraka is identified with the snake-god who is credited with supreme wisdom owing to his proximity to Viṣṇu. In every age the close ally and assistant the incarnation of Viṣṇu, has been known as an Avatāra of Śeṣa. Thus Rāma's brother Lakṣmaṇa and Baladeva brother of Kṛṣṇa, were regarded as Avatāras of Śeṣa. In each age there have been prophets and teachers who wanted to establish their supremacy by claiming to be the Avatāras of Śeṣa. Rāmānuja who opposed the monism of Śaṅkara claimed to be the Avatāra of Śeṣa. Thus Śeṣa, throughout the ages has been credited with supreme wisdom as the first servant of Viṣṇu. But, by the way, this is purely a Purāṇic tradition where viṣṇu reclines on the Ādiśeṣa and floats on the milky ocean at the beginning of each creation. Be this as it may, it is significant to note that the Greeks, the Hebrews as well as the Hindus held the serpent as a symbol of wisdom. Asclepius holds in his hand the wand round which serpent is entwined. The Hebrew prophets did the same. In India, the great Patañjali with his science of Yogic breathing was identified with Śeṣa because the serpent is known for its hissing and is credited to live on mere air for long periods. It is known as Vāyu-bhuk (वायुभुक्). Caraka also was regarded, as seen from the story of Bhāvamīśra, as the incarnation of the serpent-god. In Hindu tradition the serpent is the symbol of time i. e. eternity and is believed to be the longest-lived of creatures. It is perhaps due to this that medicine, holding long life as its goal, has taken the serpent-god for its teacher. In any case all the foregoing circumstances and tales do not support the theory of identifying Caraka with Patañjali, the grammarian and the yoga-propounder but it only ascribes

to each of these the Avatārship of Śeṣa the serpent, god. Thus one is left to one's own conjectures as to the identity and time of the author of the Caraka Saṃhitā.

It is clear from the reference given below that Caraka was acquainted with the Kṣaṇika Vāda (क्षणिकवाद) or the theory of life being a mere series of change without a substratum as propounded by the Buddhists.

न ते तत्सदृशास्त्वान्ये पारंपर्यसमुत्थिताः ।

सारूप्याद्ये त एवेति निर्दिश्यन्ते नवा नवाः ॥ ४६ ॥

भावास्तेषां समुदयो निरीशः सत्त्वसंज्ञकः ।

कर्ता भोक्ता न स पुमानिति केचिद्व्यवस्थिताः ॥ ४७ ॥

तेषामन्यैः कृतान्ये भावा भावैर्नवाः फलम् ।

भुजते सदृशः प्राप्तं यैरात्मा नोपदिश्यते ॥ ४८ ॥ च. शा. १.

"Phenomena are never the same but are continually in a state of flow; whenever they are of a similar nature they are said to be the same, although, in fact, they are produced anew. The soul-less conglomeration of phenomena is by some, said to constitute the organism. They do not believe in a self who is the doer and the enjoyer. Those who do not accept the existence of the self, preach in effect, that the effects of the actions of one are enjoyed by a new another who is similar"

There is reference also to Caitya and Stūpas, These could not be the original texts of the Agniveśa Saṃhitā. Caraka must have imported his Sāṅkhya and the arguments against the Buddhistic tenets, into the original body of the text. Buddhism was merely a schismatic school just making its way in the country a little before or a little after the time of Aśoka when it became a state religion. He must have belonged to that period of Buddhism in India when it was on the wane and Vedic tradition was again on the rise. Thus he may be placed between the third and the second century B. C., the period of the greatest spiritual and intellectual upheaval in India, with the rise of Buddhism and the struggle of ancient Brāhmanism to reassert itself, the great schools of Hindu philosophy, the uprise of the sciences and the arts based on their fundamental concepts and with the general

cultural reassertion, Āyurveda must have come into its own and found new exponents and enthusiasts.

The neglected and worn out texts were gathered again, systematized, restored and supplemented. And Caraka is either the personal or the assumed name of the great renovator of this science from its neglected condition. Time is like the ocean that throws up from its depths forgotten remnants of long past shipwrecks. Who can tell that some day a new light will not be thrown from unearthed material and reveal to us the fuller identity and detail of this illustrious name in the history of Indian Medicine. For the present he must remain incognito and we shall thank of him as evidence at present warrants as Caraka the reviver of the waning tradition of Āyurveda somewhere in the first days of the renaissance of Vedic religion in India, the period of our greatest intellectual unrest when ancient Vedic tradition felt pulled at the very roots and reacted powerfully in reasserting its supremacy in the soil of its origin and growth.

CHAPTER VII. DRĪDHABALA

Dr̥ḍhabala the redactor of the Caraka Saṃhitā was as he himself informs in a passage at the end of the last section of the treatise, a native of Pañcanadapura (पञ्चनदपुर). Verses in the Saṃhitā furnish historical data regarding his father's name, his residence and the supplementary redaction which he did. He also explains the significance of the term redaction and says,

अस्मिन् सप्तदशाध्यायाः कल्पाः सिद्धय एव च ।

नासाद्यन्तेऽग्निवेद्यस्य तन्त्रे चरकसंस्कृते ॥ २८९ ॥

तानेतान् कापिलबलिः शेषान् दृढबलोऽकरोत् ।

तन्त्रस्यास्य महार्थस्य पूरणार्थं यथातथञ्च ॥ २९० ॥

च. वि. ३०

"The seventeen chapters and the sections on pharmaceutics and success in treatment in the treatise composed by Agniveśa and revised by Caraka have not been found. These Dr̥ḍhabala the son of Kapilabala reconstructed, thus bringing faithfully to completion, the great aim of this treatise".

विस्तारयति लेशोक्तं संक्षिपत्यतिविस्तरम् ॥ ३६ ॥

संस्कर्ता कुंरते तन्त्रं पुराणं च पुनर्नवम् ।

अतस्तन्त्रे तममिदं चरकेणातिबुद्धिना ॥ ३७ ॥

संस्कृतं तत्त्वमपूर्णं विभागेनोपलक्ष्यते ।

तच्छङ्करं भूतपतिं संप्रसाद्य समापयत् ॥ ३८ ॥

अखण्डार्थं दृढबलो जातः पञ्चनदे पुरे ।

कृत्वा बहुभ्यस्तन्त्रेभ्यो विशेषोच्छिन्नोऽयम् ॥ ३९ ॥

सप्तदशौषधाध्यायसिद्धिर्कल्पैरपूरयत् ।

इदमन्यूनशब्दार्थं तन्त्रदोषविवर्जितम् ॥ ४० ॥

षड्विंशता विचित्राभिर्भूषिता तन्त्रयुक्तिभिः ।

च. सि. अ. १२

“The redactor enlarges what is concise and abbreviates what is very prolix and in this manner brings an ancient work up-to-date. Thus, this best of all treatises, which is replete with truth and wisdom and which has been redacted by the extremely enlightened scholar Caraka is now available only in three quarters of the original extent. Accordingly, in order to make the treatise complete, Dr̥ḍhabala, born in the town of Pañcanada restored the lost portion, having propitiated God Śiva, the Lord of creatures. He added seventeen chapters in the section on Therapeutics as also the two sections on Pharmaceutics and Success in Treatment in entirety, by culling his data from various treatises on the science. Thus, this treatise is not deficient either in respect of diction or in respect of content, and is free from any blemishes besetting a scientific treatise and is embellished with the thirty-six canons of exposition”.

Thus we are on more definite grounds in the case of Dr̥ḍhabala but in identifying his native place the ancient practice of calling any sacred place where five streams conjoin by the name of Pañcanada, presents great difficulties.

In India any confluence of streams is as a sacred place of pilgrimage and as a consequence we find several such places which

विस्तारयति लेशोक्तं संक्षिपत्यतिविस्तरम् ॥ ३६ ॥

संस्कर्ता कुंरते तन्त्रं पुराणं च पुनर्नवम् ।

अतस्तन्त्रे तममिदं चरकेणातिबुद्धिना ॥ ३७ ॥

संस्कृतं तत्त्वमपूर्णं विभागेनोपलक्ष्यते ।

तच्छङ्करं भूतपतिं संप्रसाद्य समापयत् ॥ ३८ ॥

अखण्डार्थं दृढबलो जातः पञ्चनदे पुरे ।

कृत्वा बहुभ्यस्तन्त्रेभ्यो विशेषोच्छिन्नोऽयम् ॥ ३९ ॥

सप्तदशौषधाध्यायसिद्धिर्कल्पैरपूरयत् ।

इदमन्यूनशब्दार्थं तन्त्रदोषविवर्जितम् ॥ ४० ॥

षड्विंशता विचित्राभिर्भूषिता तन्त्रयुक्तिभिः ।

च. सि. अ. १२

“The redactor enlarges what is concise and abbreviates what is very prolix and in this manner brings an ancient work up-to-date. Thus, this best of all treatises, which is replete with truth and wisdom and which has been redacted by the extremely enlightened scholar Caraka is now available only in three quarters of the original extent. Accordingly, in order to make the treatise complete, Dr̥ḍhabala, born in the town of Pañcanada restored the lost portion, having propitiated God Śiva, the Lord of creatures. He added seventeen chapters in the section on Therapeutics as also the two sections on Pharmaceutics and Success in Treatment in entirety, by culling his data from various treatises on the science. Thus, this treatise is not deficient either in respect of diction or in respect of content, and is free from any blemishes besetting a scientific treatise and is embellished with the thirty-six canons of exposition”.

Thus we are on more definite grounds in the case of Dr̥ḍhabala but in identifying his native place the ancient practice of calling any sacred place where five streams conjoin by the name of Pañcanada, presents great difficulties.

In India any confluence of streams is as a sacred place of pilgrimage and as a consequence we find several such places which

passages of the earlier portion of the treatise. The probability is that in all these cases the reference is to Dṛḍhabala's redaction of the Caraka Saṃhitā; for in reference to the concluding portion of the treatise Dṛḍhabala is, as a rule, quoted by name as its author. It seems clear from their method of quotation that the medical writers of that period were fully aware of the exact share which Dṛḍhabala had in Caraka's redaction of Agriveśa's original text. The references are clear indications of Kashmir being Dṛḍhabala's home. The Punjab (lit. Pañca Ap, or land of five waters) is often erroneously taken to be Pañcanada, but this according to Hoernle is untenable on Dṛḍhabala's own authority, as he clearly indicates a town (ग्र) and not a country as his home. Benares is also sometimes indentified with Pañcanada. Gaṅgādharma in his commentary on Caraka says: 'Dṛḍhabala lived in Kāśī, Pañcanadapura. Tirtha is often applied to this city, it being the sacred place of pilgrimage where five rivers the Kiraṇā, the Dhūtaṇḍā, the Saraswati, the Ganges and the Jumna meet. But as we have seen, the references to the Kashmirian recensions by earlier commentators reduce the claims of Benares as the home of Dṛḍhabala to nullity.

We need not consider the claims of Panjpir or hill of five Pirs an isolated ridge in the Yusufzai plains NNW of Attock. The claim can be summarily dismissed as it is a mohammedan place of pilgrimage and the claim is the result of a superficial similarity of sounds and the natural inability of some western scholars to distinguish the essential difference. Thus the theory of Pantzinor (पन्तिनोर) being the home of Dṛḍhabala is fairly well-established.

We are thankful to Dṛḍhabala for giving us the historical data of his lineage and residence, but regarding the period in which he flourished, he leaves us in the dark. In order to arrive at a definite conclusion regarding his period, we have to rely on external evidence, such as reference to him in works of the authors of known date and thus establish his priority to those and the negative evidence on the absence of references to him in works which may be placed anterior to his period. In this view

we can come as near to historical exactitude as is possible regarding his time.

On scrutinizing the text of the Carak Saṃhitā and Vāgbhaṭa's Aṣṭāṅgahṛdaya (अष्टाङ्गहृदय) and Aṣṭāṅgasangraha (अष्टाङ्गसंग्रह) we find that Vāgbhaṭa is indebted to the Caraka Saṃhitā to an appreciable degree while Dṛḍhabala has not taken anything from Vāgbhaṭa. Vāgbhaṭa has summarized important portions of both Caraka and Suśruta and the descriptions of Pāṇḍu (पाण्डु) and Udara (उदर) and other chapters have been largely drawn from Caraka and Suśruta. In other chapters, the prose portion of Caraka redacted by Dṛḍhabala is versified ad verbatim. These facts go to show that Dṛḍhabala flourished before Vāgbhaṭa.

Although the whole of the commentary on Caraka by Jejjāṭa is not available, some of the available portions definitely relate to Dṛḍhabala's redaction. Now Jejjāṭa was a pupil, and hence a contemporary of Vāgbhaṭa. This establishes that Dṛḍhabala was anterior to Vāgbhaṭa.

Although very little data is available regarding Dṛḍhabala's period we are on surer ground regarding Vāgbhaṭa's period. It is the Chinese traveller, who visited India between 675 and 685 A. D. and in his memoirs we find references to Vāgbhaṭa. This places Vāgbhaṭa somewhere before the 7th century and this is supported by the fact that Mādhava, the author of Mādhavanidāna quotes Vāgbhaṭa. This work was translated into Arabic by the orders of Haroun-al-Raschid in the 8th century (750-850 A. D.). Hence if we put the period of the composition of Mādhavanidāna in the 7th century, Vāgbhaṭa's period recedes by about a century i. e. to the 6th century. We find quotations from Vāgbhaṭa in the Kandarpikā (कन्दर्पिका) a chapter of Varāhamihira who lived in the 5th century and so Vāgbhaṭa will have to be placed before this period. Another medical author Bhaṭṭāra Haricandra (भट्टार हरिकन्द्र) was a contemporary of Vāgbhaṭa. As Bhaṭṭāra Haricandra flourished during the reign of king Śaḥasāṅka (शहसङ्ग 375-413 A. D.), Vāgbhaṭa cannot be later than the 4th century. The negative evidence of any reference to Dṛḍhabala or his work in Nāvanitaka (नावनीतक) which was composed in the first part of the 4th century, provides the upper limit to

Dr̥ḍhabala's period and hence we can put Dr̥ḍhabala fairly somewhere between the end of the 3rd century and beginning of the 4th century. Now the question is regarding what part Dr̥ḍhabala played in the redaction: whether he redacted the whole work or only 41 chapters.

We are informed by the text that all the 12 chapters of Kalpa-sthāna, all the 12 chapters of Siddhi-sthāna and 17 Chapters of Cikitsā-sthāna of the Agniveśa-tantra as redacted by Caraka were not available at Dr̥ḍhabala's time.

अस्मिन् सप्तदशाध्यायाः कल्पाः सिद्धय एव च ।
नासाद्यन्तेऽभिवेशस्य तन्त्रे चरकसंस्कृते ॥ २८९ ॥
तानेतान् कापिलवलिः शेषान् दृढबलोऽकरोत् ।
तन्त्रस्यास्य महार्थस्य पूरणार्थं यथावत्तम् ॥ २९० ॥

च. चि. ३०

टीका- संप्रति दृढबलः स्वकीयसंस्कारविषयं दर्शयन्नाह । अस्मिन्नित्यादि सप्तदशाध्यायाः
ने च चरकसंस्कृतान् यद्वच्चिकित्सतान्तानशब्दव्याख्यानं तथाशौऽतिशारविषयं द्विविधं प्रसङ्गप्रयोजकान्
विहाय श्लेषाः ।

“The seventeen chapters and the Sections on pharmaceutics and Success in Treatment in the treatise compiled by Agniveśa and revised by Caraka have not been found. These Dr̥ḍhabala, the son of Kapilabala has reconstructed, thus bringing faithfully to completion, the great aim of this treatise.”

As there are 30 chapters in Cikitsā sthāna, it would be interesting to try to find out which are the 17 chapters that were missing but were reconstructed by Dr̥ḍhabala.

We find that there are two orders of the Chapters of Cikitsā-sthāna available. One is the order which is given in this text. In the other order, chapters nos. 9, 10, 11, 12, 13 are substituted by nos. 14, 19, 21, 24, and 25 respectively while the Chapters 9 to 30 are re-numbered as 14 to 30, the chapters 14, 19, 21, 24 and 25 being promoted.

In order to make it more clear the chapters are given in a tabular form thus:—

Serial No. in the first order	Name of the chapter.	Serial No. in the second order
A.		B.
1	रसायन	रसायन
2	वाजीकरण	वाजीकरण
3	उवर	उवर
4	रक्तपित्त	रक्तपित्त
5	गुल्म	गुल्म
6	प्रमेह	प्रमेह
7	कुष्ठ	कुष्ठ
8	राजयक्ष्म	राजयक्ष्म
9	उन्माद	9 अर्ध (14 A)
10	अपरमार	10 अलिसार (19 A)
11	क्षत	11 विसर्प (21 A)
12	शोथ	12 मदात्यय (24 A)
13	उदर	13 द्वितीय (25 A)
14	अर्ध	14 उन्माद (9 A)
15	ग्रहणी	15 अपरमार (10 A)
16	पाण्डु	16 क्षत (11 A)
17	श्वस	17 शोथ (12 A)
18	कास	18 उदर (13 A)
19	अलिसार	19 ग्रहणी (15 A)
20	उर्ध्व	20 पाण्डु (16 A)
21	विसर्प	21 श्वस (17 A)
22	तृणा	22 कास (18 A)
23	विष	23 उर्ध्व (20 A)
24	म.ायय	24 तृणा (22 A)
	विष	25 विष (23 A)
25	म.ायय	विमर्ष 26
27	उरुस्तम्भ	उरुस्तम्भ 27
28	वातव्य वि	वातव्य वि 28

29	वातशोणित	वातशोणित	29
	same in both the orders		
30	ओनिव्यापत्	ओनिव्यापत्	30

The first 8 chapters preserve their order in both the traditional arrangements and hence their order or authorship is not under dispute or doubt. They also conform to the order given in the Nidāna-sūtrāṇa. They are indisputably Caraka's. Similarly, the last five chapters are the same in both the traditional orders.

Vijayaraksita, the commentator on Mādhava-nidāna (माधवनिदान) quotes Nos. 26, 27, 28 in the name of Dr̥ḍhabala and hence they are definitely of Dr̥ḍhabala's authorship. So it is the intermediate chapters that require careful scrutiny and investigation.

Now, out of these 17 chapters under investigation, we can definitely ascribe five chapters viz. 15th, 16th, 17th, 22nd and 23rd of the 'A' order or 19th, 20th, 21st, 24th and 25th of the 'B' order to Dr̥ḍhabala as they are cited by later medical authors as emanating from Dr̥ḍhabala's pen.

Arunadatta (अरुणदत्त) the commentator on Aṣṭāṅgharḍaya, quotes Dr̥ḍhabala ascribing the 15th chapter ग्रहणी (19th of the 'B' order) to Dr̥ḍhabala.

रुडबलोऽप्याह—

रसादत्तं तत्रो मांसं मांसान्मेदस्ततोऽस्थि च ।
अस्थौ मज्जा ततः शुक्रं शुक्राद्भिर्भः प्रसादजः ॥
इत्युक्तवन्तमाचार्यै शिष्यस्त्विदमनोदयत् ।
रसादत्तं विसदशात् कथं देहेऽभिजायते ॥

The other four viz., (पाण्डु, श्वस, तृष्णा and विष) 16th, 17th, 22nd and 23rd of the A order (20, 21, 24, 25. of the B order) are quoted by the commentator Vijayaraksita and have been ascribed to Dr̥ḍhabala.

(१) पाण्डुः— (16A-20A)

“व्यायाममन्त्रं लक्षणं नि नद्ये चर्दं दिवास्त्रान्मोदतीक्ष्णम् ।
निषेव्यमाणस्य प्रक्षयं रक्तं दोषास्त्वयं पाण्डुतां नमन्ति ॥
रफमिदुपलक्षणं, तेन स्वह्म मांसमिति वाच्यं केन रुडबलोऽपि नमिति ॥ २-२ टीका

(२) दिकाषासौ—(17A-21B)

यदाह दृढबलः—कफवातात्मकवेदौ पित्तस्यानसुद्भौ ।

च. वि. अ. १७

(३) तृष्णा—(22 A-24B)

दृढबलेन तु पञ्च तृष्णाः पठिताः वातपित्तक्षयामोपसर्गजाः इति । तत्र कफश्च आमजायामेव वरुद्धा क्षतजा वातजायां, भक्तजा च वातजायां, भक्तावरणेन वातप्रकोपात् । पित्तजायां वा विदाहेन पित्तप्रकोपात् ।

(४) सूच्छांविण—(23 A-25 B)

यदुक्तं दृढबलेन—लघुलक्ष्मालुविशदं व्यवधि तीक्ष्णं विहासि सूक्ष्मं च ।

उष्णमनिर्देशरसं दशगुणं मुक्तविषं तज्जः ॥

मा. नि. १७—१५ टीका

ते तैलादौ व्यस्तास्तीवाः सन्ति, विषमययोस्तु, तीव्रतराः ।

अतस्तैलादिभिर्न मोहः, किन्तु विषमयाभ्यामिति । त एवेति गुणा लघुत्वादयः (मा.)

Now we have only 12 chapters whose authorship remains to be ascertained. Out of these 12, three chapters viz., (अर्श, अतिसार, विसर्प) 14th, 19th and 21st respectively of the A order (9th, 10th, 11th of the B order) are quoted in Nāvanīṭaka (नावनीतक) whose date has been established as being anterior in time to Dr̥ḍhabala and hence these three can unhesitatingly be ascribed to Caraka.

The chapters 24th, 25th of the A order सदात्यय and द्वित्रणिय (12th and 13th of the B order), are ascribed to Caraka by the commentator Jejjāṭa in his commentary Nirantarapadavyākhyā (निरंतरपदव्याख्या)

24th. चरकाचार्यसंस्कृतश्रायसध्यायः

25th. आचार्यप्रणीतश्रायसध्यायः

The only plausible reason for making the above statements by the commentator seems to be to distinguish these chapters from others, marking them to be the redactions of the venerable Caraka.

So these five chapters belong to Caraka. A glance at the B order will show that someone has taken out these five chapters scattered at random in the A order and has promoted them to the top of these 17 chapters in order to re-align them with the first 8 chapters, thus bringing together the work of Caraka in 13 consecutive chapters.

This leaves us with bare 7 chapters. the authorship of which is doubtful and which remain a subject of research. It seems the order was preserved upto Cakrapāṇi's time, and later on, some one changed the order, probably to group together the 13 chapters redacted by Caraka and separate them from the 17 chapters redacted by Dṛḍhabala. Caraka must have redacted all the 30 chapters of Cikitsā-sthāna and the last 17 chapters must have been lost and thus Dṛḍhabala must have supplied the redaction.

The Part Played by Dridhabala in Caraka Samhita—

Apart from the Kalpa and Siddhisthānas and the 17 chapters of Cikitsā-sthāna which are from the pen of Dṛḍhabala, it is very difficult to say whether Dṛḍhabala touched upon any other portion of the Caraka Samhitā. This question would provide an interesting and fruitful matter for research scholars. It is possible to distinguish and differentiate the styles of Agniveśa, Caraka and Dṛḍhabala. In addition to this, new concepts, medical as well as general, might have gradually crept in and if these can be sifted apart, an interesting light would be thrown on the development and history of medical science and its concept and thus the interpolations, additions and redactions can be marked out and assigned to different persons or periods. Some scholars are of the opinion that even small surgical references given in various chapters in Caraka Samhitā were imported by Dṛḍhabala. This argument on minute scrutiny will not hold good as the detailed descriptions of surgical operations are confined to the chapters which were restored and redacted by Dṛḍhabala himself.

In some chapters, we find that there are some verses which though running concurrently with the subject of the chapter are not quite in tune with the matter taken as a whole, e. g. description of children and patients in Sutra XI, 56-63 and some verses in Vimāna III, (40-44, 46-48) with the exception of the first instance (i. e., curds) the matter contained in these verses is not found in the summary or the recapitulatory verses given at the end of the chapters, and hence some may be led to conclude that these are from Dṛḍhabala or even later interpolations though nothing conclusive can be said about

these. It is very difficult to mark out such verses, for we do not get any clue from the index of chapters. Although the numbers and headings of the chapters have been given, there is no mention of the number of verses in each chapter. The absence of this enumeration of verses in each chapter might have encouraged interpolators to introduce their own verses and pass them on as the original ones. This subject is a matter for deep and laborious but interesting research for future scholars.

CHAPTER VIII

CARAKA SAMHITA A REDACTED TREATISE

We find that 79 chapters of Caraka Samhitā end with the following sentence:-

अग्निवेशकृते तन्त्रे चरकप्रतिसंस्कृते

These 79 chapters are distributed in the different sections as under:-

30 in the section on General Principles.

8 in the section on Pathology.

8 in the section on Specific Determination.

8 in the section on Human Embodiment.

12 in the section on Sensorial Prognosis.

13 in the section on Therapeutics.

But the remaining 41 chapters end with the following addition to the above quoted ending:-अग्राप्ते दृढबलवृत्ति or अग्राप्ते दृढबलवृत्ति

These 41 chapters are distributed in the different sections as under:-

17 in the section on Therapeutics.

12 in the section on Pharmaceutics.

12 in the section on Success in Treatment.

Out of these, one chapter i.e. the 25th chapter in the section on Therapeutics ends as follows:-

अग्निवेशकृते तन्त्रे चरकप्रतिगुरुकृते हृदयसंग्रहे ।

In this the word अग्नि is not found. All this indicates that the text of the 79 chapters is the portion expounded by Agniveśa and redacted by Caraka, while the text of the remaining 41 chapters is the portion expounded by Agniveśa as restored by Dṛḍhabala in the place of the unavailable portions of Caraka's redaction.

According to the History of Āyurveda as found in the texts, we learn that Bhagawān Ātreya expounded the whole science to six pupils. Each of them tried to write a systematic treatise according to his grasp and intelligence.

अथ भेलादयश्चक्रुः स्वं स्वं तन्त्रं कृतानि च । च. सू. ३३.

The treatise of Agniveś was the outstanding one among these and it received the sanction and authorisation of the committee of learned sages. Out of the six treatises of the pupils of Ātreya, only two are at present available. One is the Agniveśa-tantra (अग्निवेशतन्त्रम्) and the other Bhela-samhitā (भेलसंहिता). The latter is available only in fragments and hence it is incomplete. It is a very short and concise form though greatly similar to Agniveśa's treatise in the treatment of subject, order of arrangement, classification etc., leading to the conclusion that both received their instruction from the same preceptor. The Agniveśa Samhitā, being the outstanding work out of all the six received the attention of the redactors who incorporated into the body the progress achieved from time to time.

The period from Ātreya to Dṛḍhabala covers at least 1000 years. This was the golden period of Āyurveda and the science was continually progressive. This original text of Agniveśa might have been reviewed and redacted very often to assimilate the features of progressive science and to adapt it to the circumstances of the period; but only two redactions are known at present.

A vast field for research work lies unexplored in these treatises. The subject for research would be what actually was preached by Ātreya, what was described by Agniveśa, what Caraka did while redacting it by way of alterations and additions, what portion was

modified or completed or reconstructed by Dr̥dhbala, what were the other redactions, when were these redactions made etc. The research workers will have to resort to general history, records etc, but the labour will be amply repaid. When properly explored this quest should throw light not only on the history of medicine, but it would enlighten us on the general history of Āryan civilization from various points of view.

Now let us see what a redaction (प्रतिस्कार) is. Dr̥dhabala gives the definition of redaction as follows:—

विस्तारयति लेशोक्तं संक्षिपत्य त्वेविस्तरम् ।

संस्कर्ता कुरुते तन्त्रं पुराणं च पुनर्नवम् ॥

“The redactor enlarges what is concise and abbreviates what is very prolix and in this manner brings an ancient work up-to-date”. Redaction (संस्करण) is also defined as under:

अनेकेभ्यः ग्रन्थेभ्यः विशिष्टविषयेः विशिष्टेभ्यः तत्रस्थानात् विषयान् विविच्य अन्यविषयैः हस संस्क्रियते संबध्यते इति संस्करणम् ।

“That is called redaction by which an author correlates and supplements a work by corresponding facts and statements found in other treatises specially bearing on a subject”.

Thus we see that in a redacted work the terse portions in the original treatise is made lucid by elaboration and the portion treated too prolificly is abridged.

There are two methods of redaction. One is technically known as Sangraha and Vighraha (संग्रह-विग्रह) method as defined by Dr̥dhbala (दृढबल). The other is known as Āvāpodwāpa (आवापोद्वाप) method. The latter changes the very construction and system of the whole work altogether, and makes radical alterations changing the mould of the work. Caraka seems to have followed the former method.

The Caraka Samhita only a modified form of the original

If we compare Caraka Samhitā with Bhela Samhitā we find striking similarities, all pointing to one common usource. 1. The text is divided in eight Sthānas out of which Vimāna Indriya and Sidhi (विमान, इन्द्रिय, सिद्धि) are the new words with specific

meanings used only in Caraka, Kāśyapa and Bhela Samhitās and these new words are not found in Suśruta or later medical works. The word Kalpa (कल्प) is used in a somewhat different meaning than as used in Suśruta or later medical works.

2. The prevalent system in those days seems to be to have 120 chapters in all in medical text books. We find 120 chapters in Caraka, Bhela, Kāśyapa, Suśruta and Vāgbhaṭa, the last named author makes 120 chapters with the addition of an extra section—Uttaratantra (उत्तरतन्त्र). Thus, though the total number of 120 is maintained, the number of chapters in each section varies in Caraka Suśruta and Vāgbhaṭa but it remains the same in Caraka, Bhela and Kāśyapa.

स्थानानि		चरक- संहितायाम्	सेल- संहितायाम्	काश्यप संहितायाम्	सुश्रुत- संहितायाम्	वाग्भट- अष्टाङ्गहृदये
सूत्रस्थानम्	अध्यायाः	३०	३०	३०	४६	३०
निदानस्थानम्	,,	८	८	८	१६	१६
विमानस्थानम्	,,	८	८	८		
शारीरस्थानम्	,,	८	८	८	१०	६
इन्द्रियस्थानम्	,,	१२	१२	१२		
चिकित्सास्थानम्	,,	३०	३०	३०	४०	२२
सिद्धिस्थानम्	,,	१२	९ (१२ ?)	१२		६
कल्पस्थानम्	,,	१२	८ (१२ ?)	१२	८	
खिलभागः वा उत्तरतन्त्रम् ,,				८०	६६	४०

3. The titles of chapters are very often the same in the Caraka and Bhela Samhitās. Caraka adopts the following method of nomenclature of chapters:—

(a) According to subject.

(b) According to the first word or phrase in the chapter.

A greater resemblance is found between the Caraka Samhitā and Bhela Samhitā as will be evident from the following examples.

चरके	सेले	अध्यायनामानि
1 न वेगान् धारयेद्धीरः	न वेगान् धारयेद्धीमान्	नवेगान्वारणीयः
2 मात्राशी स्यादाहारमात्रा	मात्राशी स्याद्विपकाशी	मात्राशिलीयः
3 आत्रेयो भद्रकाप्यथ	आत्रेयः खण्डकाप्यथ	आत्रेयभद्रकाप्यथः

चरके	भेले	अध्यायनामानि
4 यस्य श्यावे परिध्वस्ते	यस्य श्यावे उभे नेत्रे	सम्यग्श्यावनिमित्तीयः
5 अवाक्शिरा वा जिह्वा वा	अवाक्शिरा वा जिह्वा वा	अवाक्शिरीसीयः
6 द्वौ पुरुषौ व्याधितरूपौ भवतः	गुरुव्याधिर्नरः कश्चित्	व्याधितरूपीयम्
7 शरीरविचयः शरीरोपकारार्थं	इह खल्व जस्तेजः	शरीरविचयः
8 शरीरसंख्यामवयवशः	इह खलु शरीरं पट् खवः	शरीरसंख्या
9 पूर्वरूपाण्यसावधानां	अन्तर्लोहितकायान्तु	पूर्वरूपीयम्
10 यस्य गोमयचूर्णमं	चूर्णं शिरसि यस्यैव	गोमयचूर्णीयम्

In the above instances we find that the first five are quite similar in both Caraka and Bhela and naturally both have given the same titles to the chapters in their works. Though the first lines differ in a considerable degree yet we find that the titles of the chapters in both the works are the same.

4. Besides this resemblance of titles, we come across many concepts and descriptions which are common to both. Caraka and Bhela.

- a. तिस्रैषणीय
- b. गुरुव्याधि
- c. सद्योमरण
- d. अतुल्यगोत्र
- e. आहारमात्राः (गुरुतावय)
- f. चतुष्पाद
- g. दशधमनी and हृदय
- h. गर्भोत्पत्ति and factors.
- i. the legend of Fever
- j. संप्राप्ति of शोष
- k. उपधापद्धति-सांसाहार (शोषे)
- l. Frightening or shock therapy in Insanity
- m. Cobra venom in त्रिदोषज्वर

There is a school of thought which ascribes the entire work to Caraka. It says that it was only a vague nucleus in the form of common medical knowledge round which Caraka reconstructed a grand edifice. But such a conclusion is precluded by the very text of the colophon अग्निवेशकृते तन्त्रे चरकप्रतिसंस्कृते ।

Undoubtedly there is much that has been added, there is much that has been abridged or expanded. Yet that Caraka merely redacted the old work cannot be denied. Caraka never claims the authorship for the work. Internal evidence also corroborates the same view-point. Even Dṛḍhabala the restorer and redactor of the last portions based his work on the original treatise and its parallel treatises.

अस्य तन्त्रोत्तममिदं चरकेनातिबुद्धिना ।
 संरक्ष्यते तेषु संख्यं विभावो नोपलक्ष्यते ॥
 * * * * *
 यस्य द्वादशसहस्री हृदि तिष्ठति संहिता ।
 * * * * *
 चिन्तिता बहुविधस्य स्वस्थानुरादत्त प्रति ॥

“Thus this best of all treatises which is replete with truth and wisdom and which has been redacted by the extremely enlightened scholar Caraka is now available only in three quarters of the original extent.* * He in whose memory resides this compendium of these twelve thousand verses* * (knows) the science of therapeutics, compiled by Agniveśa for the well being of the healthy and the ailing’.

Thus he confirms that Agniveśa was the author of the treatise consisting of twelve thousand verses. The credit of the authorship and the popular title of ‘Caraka Samhitā’ are probably due to the fact that Caraka in his missionary zeal for propagating this master piece of medical work, travelled extensively for research, lectures, propagation and experimentation and gained the nick name of Caraka—one who moves constantly. His name has got precedence over the original title of the work as Agniveśa-tantra, and the work has ever since been named after Caraka in the world.

Caraka's contribution

That Caraka merely revised and redacted an old treatise does not detract from his greatness. The ingenious method of redaction he adopted, has lent a touch of freshness and originality; and though Caraka is technically only a redactor, he must be given credit for modifying the old work and transforming it by his magic touch, into a work of unrivalled merits, which has stood the test of 2000 years.

Thus we see that Ātreya Samhitā (आत्रेय संहिता) was the seed which was watered by Agniveśa and nurtured by Caraka. It became the medical inheritance of the race, though it underwent changes. with the accretions of the thought and experience of the succeeding centuries. According to the definition of redaction (संस्कार) given by Dṛdhabala the redaction adds much that is new and deletes much that is old. Viewing the Caraka Samhitā in the light of this definition, we find that Caraka has contributed much that is original.

1. The theory of Vāda-nyāya (वादन्याय) found in Caraka Samhitā belongs to that stage of thought development to which belonged Carakas.

2. In sudation chapter (स्वेदाध्याय) Bhela Samhitā enumerates only eight kinds (संकर, प्रस्तर, सेक etc) while Caraka adds five more bringing the total to thirteen. In Kāśyapa Samhitā also we find 8 kinds. This leads us to the conclusion that old works knew only eight kinds and that Caraka has contributed five kinds more. Pālakāpya in his Hasti Ayurveda refers to Agniveśa's methods of sudation and there the additional kinds of sudation are mentioned. Thus those varieties described in Caraka Samhitā are Caraka's own contribution.

3. The Bhela Samhitā has only one chapter बुडिकागर्भाविकान्ति Caraka has also the same chapter propounding a similar theory. But later on in Caraka we find a chapter महागर्भाविकान्ति in which the subject treated shows an unmistakable flavour of later thought developments

Thus Caraka, although he is a redactor only, there is much that he has added as his original contribution, and it would indeed be a very interesting research work for scholars to find out what exactly his contribution was.

CHAPTER IX COMMENTATORS OF CARAKA SAMHITA

Bhattara Haricandra

Bhaṭṭara Haricandra was a versatile genius who made a name in the literary as well as the medical world. That he was a famous literateur is proved by a reference to him in the beginning of Harṣa-carita by the great poet Bāṇa.

पद्मबन्धोऽज्ज्वलो हारी कृतवर्णकमस्थितिः ।

भट्टारहरिचन्द्रस्य गद्यबन्धो नृपायते ॥

हर्षचरिते प्रथमोच्छवासे श्लो. १२

“The charming diction and style and the beauty of assonance of Bhaṭṭāra Haricandra give him a sovereign place among writers of prose.”

Another tribute to his literary genius is paid by Vākpati (वाक्पति) in his Prākṛita work called Gaṇḍavaha (गण्डवह)

भाषे ज्वलनमित्रे कुन्तिदेवे च यस्य रघुकारे ।

सौबन्धवे च बन्धे हारौवन्दे च आनन्दः ॥

“Who takes delight in reading Bhāsa, Agnimitra, Kuntideva and Kālidāsa, as also in diction and style of Subandhu and Haricandra.”

Unfortunately the literary world has become the poorer by the non-availability of his works in this sphere. He was equally adept in the so called prosaic medical compositions. His is the oldest commentary on Caraka Samhitā named Caraka-nyāsa (चरकन्यास). This statement is supported by the fact that he is quoted by all other known commentators of the Caraka Samhitā. But mere antiquity is not the only merit of his commentary; it is considered to be the best by many an authority like Indu (इन्दु), Tīsaṭa (तीसट) and Maheśwara (महेश्वर).

हरिचन्द्रकृता व्याख्यां विना चरकसम्मतम् ।

यस्तनोत्यकृतप्रज्ञः पातुमीहति सोऽम्बुधिम् ॥

“The ignorant one who attempts to expound the doctrine of Caraka without consulting the commentary of Haricandra verily attempts to drink up the whole ocean.”

व्याख्यातरि हरिचन्द्रे श्रीजेज्जटनाम्नि सति सुधीरे च ।

अन्यस्यायुर्ध्वे व्याख्या धाष्टर्यं समावहति ॥

(तीसटाचार्यविरचितचिकित्साकलिकाव्याख्यारम्भे)

“As there exist the commentaries of Haricandra and the learned Jejjāṭa, it is sheer presumptuousness for any one else

to attempt to comment on the texts of Āyurveda.” (Tīsaṭācārya तीसटाचार्य)

विश्वप्रकाशकोषारम्भे भट्टारहरिचन्द्रान्वयो महेश्वरः -

असिहाहवाङ्मनूषतेरनवद्यवैद्यविद्यातरङ्गपदमद्वयमेव विश्रुत् ।

यश्चन्द्रचारुचरितो हरिचन्द्रनामा स्वव्याख्यया चरकतन्त्रमलङ्कार ॥

(विश्वप्रकाशकोषः प्रथमःकान्तवर्गः श्लो.५)

“Bhaṭṭāra Haricandra of effulgent character like the moon, that adorned the office of the court-physician in unrivalled splendour of the king Sāhasāṅka has composed this excellent commentary on the treatise of Caraka.” (Maheśwara)

The verse just quoted throws an interesting light on the period of Bhaṭṭāra Haricandra. He is the contemporary of king Sāhasāṅka whose date has been fairly well established as 375-413 A. D. The king Sāhasāṅka is very often identified with Vikrama (विक्रम) or Candragupta II. But the identification is not justified. The traditional hero of Āryāvarta, Vikrama was a predecessor of Sāhasāṅka. There is no mention of Bhaṭṭāra among the Nine Gems of the court of Vikrama. A person of so high a repute as that of Bhaṭṭāra would surely have found a place among the Nine Gems. Thus the date of Sāhasāṅka, viz., 5th century A. D., i. e. after Vikrama is the date of our Bhaṭṭāra Haricandra. That he must have flourished before the 8th or 7th century A. D. is proved by references to him by Bāṇa and Vākpati quoted above who flourished in the 7th and 8th centuries respectively. That he flourished before the time of Vāgbhaṭa is amply proved by the fact that Tīsaṭa, the son of Vāgbhaṭa quotes Bhaṭṭāra Haricandra (Quotation given above). Candraṭa (चन्द्रट) wrote a commentary after seeing Jejjāṭa's commentary.

सौश्रुते चन्द्रटेनेह भिषक्तीक्ष्णसुनुना ।

पाठशुद्धिः कृता तन्त्रे टीकामालोक्य जेज्जटीम् ॥

Now Candraṭa was the grandson of Vāgbhaṭa and son of Tīsaṭa.

Jejjāṭa was the pupil of Vāgbhaṭa and naturally his contemporary. We find that Jejjāṭa has quoted Bhaṭṭāra Haricandra.

आचार्यप्रणीतश्चायमध्यायो भट्टारहरिचन्द्रेण सुविद्वतः (महात्मयचिकित्सा जेज्जटीका)

“This chapter written by the great preceptor is well expounded by Bhaṭṭāra Haricandra.” This can lead to but one conclusion

that Bhaṭṭāra Haricandra flourished before the time of Vāgbhaṭa. Besides this the commentary of Cakrapāṇi corroborates our statement. It says 'हरिचन्द्रमतानुसारी वाग्भटः' Vāgbhaṭa follows the opinion of Haricandra. Bhaṭṭāra Haricandra has also written a commentary on Kharanāda Saṃhitā (खरनादसंहिता) which was redacted later on by Indu. This Saṃhitā was a living force till the time of Aruṇadatta and Hemādri. Haricandra's commentary Caraka-nyāsa (चरकन्यास) is only partially available i. e. we get only 1, 2, 3, and 5 chapters of Sūtra-sthāna. A manuscript copy of this commentary is lying in the Madras Government library.

Swami Kumara

Very little is known about this commentator of Caraka Saṃhitā. All we know about him is that he was later than Bhaṭṭāra Haricandra as he quotes the latter frequently. His commentary is known as Pañjikā (पञ्जिका) and only the portion upto the fifth chapter of Sūtra-sthāna is available. The manuscript belongs to the Madras Government library.

Sivadasa Sen

Sivādāsa Sen's commentary on Caraka Saṃhitā is known as Tattwa-candrikā (तत्त्वचन्द्रिका). Only a portion of it (Sūtra 1-27) is available. The manuscript belongs to the Bombay Royal Asiatic Society Library.

Regarding his history, all we can gather is that he was born in the Vaidya guild, his father's name was Ananta Sen, his birth place was Mālañcikā, a village in Bengal and that the then ruler of Gauda Bengal was Bārbaka Sāha who ruled over Bengal from 1456 to 1474 A. D.

मालखिकाग्रामनिवासभूमेर्गौडावनीपालमित्रवरस्य ।

अनन्तसेनस्य सुतो विवर्ते टीकामिमां श्रोत्रिवदाशसेनः ॥

। (चक्रदत्तयोगसंग्रहव्याख्यायाः । ब्रह्मगुणसंग्रहव्याख्यायाश्चान्ते)

शेखरतरङ्गपदवीं दुरवापां छत्रमप्यतुलकीतिरवाप ।

गौडभूमिपतिकार्यकसाहस्य तस्सुतस्य कृतिनाः कतिरेषाः ॥

That he belonged to Bengal is also evident from his name ending viz., Sen. He was a Vaiṣṇavite in spite of his name Śivadāsa Sen.

The following works stand in his name—

1. तत्त्वचन्द्रिका
2. द्रव्यगुणसंग्रहव्याख्या
3. तत्त्वदीपिका (चरकटीका)
4. अष्टाङ्गहृदयतत्त्वबोधव्याख्या

His commentary written in 1448 A. D. is available in parts.

JEJJATA

Next to Bhaṭṭāra Haricandra among the commentators of Caraka Saṃhitā comes Jejjata in point of time. It is established that he was a pupil of Vāgbhaṭa. इति वाग्भटशिष्यस्य जेजटस्य कृतौ निरन्तरपदव्याख्यायाम् and hence we find no difficulty in fixing his period in the 9th century A. D. He wrote a commentary on Suśruta also which is the oldest known commentary on the work. Dalhana, a later commentator on Suśruta quotes from Jejjata's commentary and so does Candaraṭa (चन्द्रट) the grandson of Vāgbhaṭa (according to Aufrecht the author of Catalogus Catalogorum), and so it must have been available upto Dalhana's and Candaraṭa's time. A revised edition of his commentary copied from Madras Government Oriental Library has been published. The revision was done by Haridatta (हरिदत्त).

His commentary on Caraka is known as Nirantarapada-vyākhyā (निरन्तरपदव्याख्या) and only the following sections of his commentary are not available at present.

Cikitsā 5-71 to Cikitsā 23-160, Kalpa 1-5, Siddhi 2, Siddhi 7-32 to end.

Some people believe that he was the son of Kaiyata (कैयट). This belief seems to have sprung from the fact that Kaiyata had a son named Jaiyata and the letters 'ज' and 'य' are phonetically interchangeable but this Jaiyata and Jejjata were not the same person and the identification rests on no surer foundation than a similarity of sounds, which again is based on the interchangeability of sounds during the

Prākṛta formation period.

Jejjāta may be a Kashmirian as is suggested by the 'z' ending of his name which was common among the Kashmirians e. g. Kaiyāta, Mammāta and others. But more probably he was an inhabitant of Sind, as he studied under Vāgbhaṭa, though nothing could have prevented an ardent Kashmirian to undertake the hazards of travel to Sind to have the privilege of studying under so famous a preceptor as Vāgbhaṭa.

CAKRAPANI

Cakrapāṇi is the most famous among the commentators of Caraka Saṃhitā. His commentary is in its entirety. It has been printed at many places.

We learn from his own statements at the end of his Nyur-veda-dīpikā and Cikitsā-sangraha and also from Śivadāsa, the commentator of Cikitsā-sangraha that Cakrapāṇi's father's name was Nārāyaṇa and his elder brother's name was Bhānudatta. Both his father and brother were in the service of the Gauda king, Nayapāla. His preceptor's name was Naradatta. Historians have fixed Nayapāla's time as 1040-1070 A. D. i. e. the middle of the 11th century.

गौडाखिनथरसवत्यधिकारिपात्रनारायणस्य तनयः सुनयोऽन्तरङ्गात् ।

भानोरजु प्रथितलोभ्रबलोकुकीनः श्रीचक्रपाणिर्हि कर्तृपदाधिकारी ॥

Thus the period of this most popular of Caraka commentators is easily fixed. He was a native of Bengal. This statement is supported by many references internal as well as external. Jayadeva says—

वङ्गान्तर्गतवीरभूमेशवास्यव्यथायं चक्रपाणिः श्रूयते तत्र हि श्रीचक्रपाणिस्थापितं श्रीचक्रपाणीश्वर-
मन्दिरमप्यस्ति ।

"This Cakrapāṇi is reputed to be a resident of Birbhum district of Bengal. There exists even a temple dedicated to the deity called Cakrapāṇīśvara, built by Cakrapāṇi."

From the benedictory opening verses of Cakra-sangraha, we

learn that several epithets like Vaidya, Mahāmahopādhyāya and Śivabhakta are applied to him.

Besides his unrivalled commentary on Caraka three other works are ascribed to his pen viz.,

(१) भातुमतीव्याख्या on Suśruta (सूत्रस्थान only)

(२) चक्रवर्तसंग्रह or चिकित्सासंग्रह

(३) द्रव्यगुणसंग्रह

CHAPTER X THE PUPILS OF ATREYA

We learn from Caraka Saṃhitā that Maharṣi Ātreya had six pupils.

अग्निवेशश्च मेरु(ह)श्च जतूकर्णः पराशरः ।

हारीतः क्षारपाणिश्च जगद्गुस्तन्मुनेर्वचः ॥ च. सू. १, ३१.

All these received instruction from their Guru Ātreya and each wrote a treatise on medicine. All these treatises were submitted to a committee of Rṣis for examination. The treatise of Agniveśa was found to be the best among all these six and hence it was authorised to be the universal text-book.

बुद्धेर्विशेषस्तवासीन्नोपदेशान्तरं मुनेः ।

तन्वदय कर्ता प्रथममग्निवेशो यतोऽभवत् ॥

अथ मेलादयवकः स्वं स्वं तन्त्रं कृतानि च ।

आवयामासुरात्रेयं सर्विभङ्गं सुमेधयः ॥

We have already dwelt upon Agniveśa, the foremost pupil of Ātreya

BHELA

Agniveśa and Bhela studied at the same master's feet and hence we find great similarity in their works. But Bhela Saṃhitā is more concise and there is more prose in it than in his distinguished co-student's treatise. The Bhela Saṃhitā as handed down to us seems to be of quite old composition. Unfortunately the treatise is incomplete and mutilated. Here and there portions are missing and

the text is full of scribe's errors. The book is considered to be old even by Vāgbhaṭa and is spoken of reverentially by him.

ऋषिप्रणीते प्रीतिश्चेन्मुक्त्वा चरकमुत्तु ।

भेडाद्याः किं न पठ्यन्ते तस्माद् ग्राह्यं सुभाषितम् ॥ अ. ह. ६, ४०.

Bhela's name is very often given as Bheda by Vāgbhaṭa and Dalhana. This interchange of ड and ढ however is authorized by ancient usage (डलयोरभेदः).

It seems that no redaction was done of Bhela's original treatise. But some of the quotations of Bhela given by later authors are not found in the treatise available now. This can lead us to one of the conclusions that either the portion quoted by later authors but not found in the treatise has been lost or that some earlier redaction might have been done.

Only one manuscript of Bhela Samhitā is known to exist. It is in the Tanjore Library No. 10773 (Burnell's catalogue). Telugu and Devanāgarī manuscripts are believed to have been written. The Tanjore library manuscript was written about 1650 A. D. apparently copied from an injured Olai-manuscript. It is in large and clear hand.

As Bhela was a co-student of Agniveśa, his Samhitā was composed at the same time. Thus the Bhela Samhitā is of great help to us in differentiating Agniveśa's original work from the later redactions of Caraka and Dṛḍhabala.

Bhela Samhitā, fragmentary and mutilated though it is, must be studied by scholars with great care, as many new terms, similes, concepts and greater details of some subjects will be found in it, which will throw more light on medical history. Frequent references to Gāndhāra i. e. modern Kandhar in his work lead us to infer that he was a resident of that country. The following verses from Bhela Samhitā are indicative of many things.

गन्धारभूमौ राजर्षिर्नम्रजित्स्वर्गमार्गिणः ।

संगृह्य पादौ पप्रच्छ चान्द्रमासं पुनर्वसुम् ॥

न च स्त्रीभ्यो न च (१) स्त्रीभ्यो न स्त्र्येभ्योऽस्ति मे भयम् ।

अन्यत्र विषयोभ्यः तेजं (सोऽत्र) मे शरणं भवान् ॥

एवमुक्तस्तथा तस्मै महर्षिः पार्थिवर्षये ।

विषयोगेषु विज्ञानं प्रोवाच वदतां वरः ॥

भेल-अन्नपानरक्षीयम्

These lines have been of great value to the medical historian as they are helpful in proving the identity of Cāndrabhāgi and Punarvasu. They are also significant of the great progress of the science of poison and the king being in constant fear of being poisoned. The verses mention the name of the ruler and his country and also the status of the court physician and the desire of the king to learn the science.

In the Janapada-vibhaktiya (जनपदविभक्त्यौ) chapter we find new terms as applied to fevers in animals.

गवां च चारणाख्या च चतुष्पातश्चापवेषु च ।

इन्द्रजालश्च मत्स्येषु शकुनानां प्रमीलकः ॥

चित्रकः सर्षपधान्येषु दवो मूलफलेषु च ।

हस्तिनां फालनाश्वेषु ज्वर इत्यभिधीयते ॥

उत्कर्षकस्तथाश्वेषु तेजस्सर्वांशेषु च ।

सर्वत्र वसति ह्येष एष चार्त्तक(व) उच्यते ।

(Hay fever)

तं धूमकिन्तु(किंतुं) प्रत्यक्षं क्षिप्रं प्रशानयेज्ज्वरम् ।

असालम्बं गन्धमादाय वातो यथातिरिच्यते ॥

In the same chapter he gives an interesting description of the countries and their peculiar diseases.

तस्मिज्जनपदे रोगाः के भवन्त्यधिक इति ।

गुर्दाड्यैः (लि) ना पृष्ठो ष्वाचक्षुः पुनर्वसुः ॥ १ ॥

मत्स्यान्मोजिनो निस्थं प्राग्याः स्युः कफभित्तिः ।

अक्षीपदं गलगण्डं च प्रायश्चस्तेषु दृश्यते ॥ २ ॥

नक्षीतीयगतान्मत्स्यान् मक्षयन्ति समुद्रजान् ।

प्रायशः कुष्ठिकास्तेन मनुष्याः दक्षिणादिदिशि ॥ ३ ॥

मसूरयवगोधूमविलकोद्गलपविनः ।

भूयिष्ठमर्शसस्तेन काश्मोजा दन्तजाः स्मृताः ॥ ४ ॥

मांसकामाः सुराकामाः स्त्रीकामाः साहसप्रियाः ।

प्रतीच्यास्तेन भूयिष्ठं दृश्यन्ते राजयक्ष्मिणः ॥ ५ ॥

तीक्ष्णोष्णानि हि बाह्वीकाः प्रायेणान्मानि भुञ्जते ।
 अमिष्यन्दीनि मांसानि पानकान्यौदकानि च ॥ ६ ॥
 प्रकृत्या चाप्यभिषस्मा पार्वतोपत्यकाः सदा ।
 तेन बाह्वीकदेशेषु प्रायो ह्यधिर्विलासकः ॥ ७ ॥

Bhela described eight varieties of sudation.

संकरं प्रस्तरं सेकं नाडीदोणजलानि च ।
 उदकोष्ठं कुटिं चैव स्वेदमष्टविधं विदुः ॥

But Caraka gives 13 varieties. So it seems Agniveśa must have described only 8 kinds and five more were added during the redaction by Caraka.

The Bhela Samhitā was considered to be a book of great merit for long as proved by numerous quotations and references to him in medical works separated by centuries.

Kaśyapa, in the section called Siddhi, chapter I says त्रिवर्षस्यैव तु हितं नेति, भेलस्तमब्रवीत् । Dalhaṇācarya in निबंधसंग्रह व्या-सू. ३३-१९ says प्रवाहिकामिति विदुः बिम्बिशी त्वपरे बुधाः

Vāgbhaṭa चि. २१-७२

मेडस्य सम्मत्तं तैलं तत्कृच्छ्राननिलामयान् ।
 वातकुण्डलिकोन्मादगुल्मवध्मादिकान् जयेत् ॥

Arunadatta: commentary of Vāgbhaṭa.

मेडोऽप्यधीते
 यस्य दर्शनमायाति वायुरम्बरगोचरः ।
 वह्निर्नायाति क्षीतोऽपि तस्यायुः क्षयमादिशेत् ॥

Hemādri:

यदाह मेडः
 स्वप्नकामो दिवाकाममुपविष्टः शयीत वा ।
 प्रस्तीर्णाङ्गस्य जन्तोर्हि श्लेष्मा कोष्ठे प्रवर्तते ॥

Śivadāsa and Cakrapāṇi:

नागरं देवकाष्ठं च धान्याकं बृहतीद्वयम् ।
 दद्यात्पञ्चनक्तं पूर्वं ज्वरिताय ज्वरापहम् ॥

चक्रदत्तः

भेलस्य योगोऽयं-तत्त्वचन्द्रिका

भेलेऽप्युक्तम्

वसितं लङ्घयेत्सम्यक् शुद्धिलिङ्गान्यलक्षयन् ॥

तानि दृष्ट्वा तु पेयादिकमं कुर्यान्न लङ्घयेत् ॥

तत्त्वचन्द्रिका

Tisatā

तथा च भेलः

एकाहोपरतः स्नेहः स्थित्वा प्रच्छर्दनं पिबेत् ।

भुक्त्वा ग्राम्यौदकैर्मसैरानूपैश्च सुसंस्कृतैरिति ॥

चिकित्साकलिका

JATUKARNA

Not much is known about Jatūkarna, the co-student of Agniveśa and a great medical author of the golden age of Āyurveda. He is also said to have compiled a medical treatise, but it is not available now. It seems it was available upto Cakrapāṇi's time as we find profuse quotations from Jatūkarna in Cakrapāṇi's work. Cakrapāṇi seems to have selected passages more from Jatūkarna than Bhela.

In Śatapatha Brāhmaṇa he is described as the propounder of Brahma-vidyā. He is also a great seer whose name is reverently used to denote a Gotra.

The word Jatūkarna as such means bat-eared. We do not know whether our Jatūkarna had ears like a bat or whether it was just a proper noun without any relation to its derivation.

Jatūkarna is also known as Jātūkarna and is quoted in many famous medical works.

Vyākhyā Kusumāvalī

१. यदुक्तं जातूकर्णे

त्रिसप्ताहे व्यतीते तु ज्वरो यस्तनुतां गतः ।

ह्रीद्दामिसादं कुरुते स जीर्णज्वर उच्यते ॥

२. जातूकर्णेनाप्युक्तम्

भूतिस्वन्धनगुह्यचीष्टयस्ता वा सवार्थभयापाठा इति ॥

Vyākhyā Kusumāvalī (व्याख्याकुसुमावली) contains many other quotations out of which only two are cited above.

Nibandha Saṅgraha: (निबन्धसंग्रह)

१. यदुक्तं जातूकर्णेन
शुक्रार्थे तैललवणमिति ।

Tattwa-candrika: (तत्त्वचन्द्रिका)

१. जातूकर्णेऽपि
कषायरसगुरुगणहिनश्चस्नानाभ्यङ्गान् नवउवरे वर्जयेत् ।
२. जातूकर्णे
जीर्णस्त्र्योदशदिवसः

We refrain from giving more quotations from this work for fear of length.

In commenting on Palāṅkaśādyam Tailam Sivadasa quotes the different readings from Jatūkarna

जतुकर्णे गोलोमी पठ्यते न तु पूतना ।....अतिरसा
जलयष्टिमधु अन्ये तु ज्योतिष्मतीत्याहुः मधुकमिति ।

Vyākhyā Madhukoṣa:

यदाह जतुकर्णः
आद्याश्चतस्रो दुःसाध्या यमिका मोहतृष्णावतः सद्यः प्राणहत् ।

Suśruta:

जातुकर्णेन
अशुक्रार्थे तैललवणम्

Vāgbhaṭa's Aṣṭāṅgahrdaya:

जतुकर्णेनाप्येवमुक्तम्
वर्षासु चरन्ति घनैः सहोरगा वयति कीटलूतश्च ।
तद्विषजुष्टमपेयं खजलमगस्त्योदयात्पूर्वम् ॥ इति

Besides this, we find a host of quotations from Jatūkarna in Vāgbhaṭa.

It is said that we come to know of the work of this greatly learned author through the scattered quotations in other medical works, the original work having been lost to us, perhaps for ever.

PARASARA

Ṛṣi Parāśara was one of the six disciples of Maharṣi Ātreya and a co-student of sage Agniveśa. He, too, wrote a treatise on medicine but is not available now.

The word Parāśara means a posthumous son, but we have no evidence to show that this Parāśara was posthumously born. Medical authors belonging to various ages have quoted substantively from Parāśara. He was one of the Ṛṣis invited by Romapāda to learn the science of the treatment of elephants. In Hasti-Āyurveda (हस्ति-आयुर्वेद), a treatise on the treatment of elephants, Parāśara is referred to as under:

पराशरमचूडं मतङ्गं चोर्मिमालिनम्

हस्ति आर्वेद. १-१-२८.

“Parāśara, Acūḍa, Mataṅga and Ūrmimālī (were also invited)’ H. A. H. 28.

A treatise called Takra-kalpa (तककल्प), the pharmaceutics of buttermilk is also ascribed to him.

We give below a few specimen quotations from him found in other medical works of repute.

Suśruta:

नाभिरिति पराशर्यः ।

Dalhana while commenting on Suśruta Samhitā says:-

सर्वकायचिकित्सासु ये दृष्टाः परमर्षिणा । उ. ३९. ७.

षट्शब्द is used to signify the six treatises on medicine as composed by Agniveśa, Bhela Jatūkarna, Hārīta, Kṣārapāṇi and Parāśara.

Kaśyapa:

पराशर्यस्तु नेत्याह तदा दुर्लभितो हि सः ।

Dalhana quotes Parāśara.

पराशरस्तु वस्तिकर्मणि मात्रासंख्यामाह-

जानुमण्डलमावेष्ट्य दत्ते दक्षिणपाणिना ।

कृष्टनेत्रञ्छटाशब्दशतं तिष्ठेदवेगवान् ॥

सु. चि. ३८-६. टीका

Vāgbhaṭa:

पराशरस्तु पठति

पाकाद्यो रसानामम्लोऽम्लं पच्यते कटुः कटुकम्

अ. सं. सू. १७.

Vāgbhaṭa mentions that each of the disciples of Ātreya has composed a treatise (तेऽग्निवेशादिकास्ते तु पृथक् तन्त्राणि तेनिरे). Arunadatta, while commenting on this line makes it clear by mentioning the names of each author, Parāśara being one of them. This commentator quotes Parāśara at various places e. g. in the description of various kinds of rice:

पराशरऽप्युक्तम्

रक्तो महान्छकुनाहतषष्टिककलभप्रमोदपतङ्गाशीतगौरवैर्घृण्युक्तसुगन्धिकपाण्डुतपनीयाः शालयः एवं-
भूताः । मधुरवहलाः स्थिराः स्निग्धाः पित्तानिलप्रशमनाः लघवः संप्राहिकाः शीताः ।

The other commentator of Vāgbhaṭa, Hemādri, in his commentary Āyurveda- rasāyana (आयुर्वेद-रसायन) quotes Parāśara:

पराशरस्तु तिक्तकषाययोर्मधुरविपाकमाह ।

Cakrapāṇi quotes him as under in his commentary Āyurveda-dīpikā (आयुर्वेद-दीपिका):

उक्तं हि पराशरे

आहारोऽद्यतनः श्वो हि रसत्वं गच्छति तृणाम् ।

शोणित्वं तु तृतीयेऽहि चतुर्थे मांसतामपि ॥

मेदरत्वं पञ्चमे बध्ने त्वस्थित्वं सप्तमे त्वियात् ।

मज्जतां शुक्रतां याति नियमादहमे तृणाम् ॥

उक्तं हि पराशरे

मूलं गुदं शरीरस्य क्षिरास्तत्र प्रतिष्ठिताः ।

सर्वं शरीरं पुष्पन्ति मूर्धानं यावदाश्रिताः ॥

Śivadāsa in his Vyākhyā-kusumāvalī quotes him in several places.

१. पराशरेणाप्युक्तम्

उवरितं उवरयुक्तं वा दिनान्ते भोजयेच्छु ।

स्फुटो यस्यान्तरग्निः स्वात्स्नैमित्त्योपरमात्तदा ॥

२. बदाह पराशरः

निर्बाह्येत्सफेनं च निष्पुत्रीवं मुहुर्मुहुः ।

प्रवाहिकेति साख्याता कैश्चिन्निश्चारकस्तु सः ॥

Parāśara's works have long fallen into oblivion and have shared the fate of many a learned work that has probably been lost for ever. All we learn about his works is from the quotations found in other works. That medical authors of repute have quoted him proves that he must have been held as an authority of no ordinary repute in their times.

Hārīta

Hārīta belonged to the galaxy of the six brilliant pupils of Ātreya. He, too, is reputed to have composed a Samhitā, but his work is also not available.

There is a Hārīta reputed to have learnt at the feet of the great sage Jābālī and to be the author of Dharma and Smṛti books. Whether this Hārīta is the same as the co-student (सजीव) of Agniveśa is not certain.

Another Hārīta quotes from Vāgbhaṭa and hence is of much later origin and hence of no concern to our present theme.

Hārīta the pupil of Ātreya, is quoted in many famous medical works and is often referred to as old Hārīta.

The following specimen quotations selected at random shows how widely he was reputed as an authority.

Vyākhyā-kusumāvalī.

हारीतेन प्रत्येकमेव दूषणमुक्तम्
 व्यायामाज्वरसंवृद्धिर्व्यायातस्तम्ममू चर्द्धनम् ।
 मरणं पानतः स्नेहाच्छर्दिमुच्छर्मदोरुचिः ॥
 गुर्वज्भोजनाच्चापि विष्टम्सी दोषकोपनम् ।
 शीतवारिकषायाम्ब दोषविष्टम्भनाऽहिते ॥
 अमिसादः खरत्वं च स्नेतसां वातवर्धनम्
 तस्मादामज्वरे सर्वांस्त्रिषवस्परिवर्जयेत् ॥

Vyākhyā-madhukōṣa:

यदाह हारीतः

शिरोग्रहः स्वेदभवश्च कासो ज्वरस्य किञ्च कफवातजस्य ।

Tattva-candrikā:

यदाह हारीतः

किरातं पर्वटं मुस्तं गुडूची विश्वभेषजम् ॥

पित्तश्लेष्मज्वरे कुर्यात् पाचनं ज्वरनाशनम् ॥

Caraka-tattva-pradīpikā:

यत्नु हारीते

“ त्रिदोषमलनुद्देशधातुसामान्याच्छागलं लघु इत्युक्तं ।

Bhāva-prakāśa:

आह हारितः

लोहस्थितं निम्बगुडूचीसर्पिर्यवैर्यथावत् परिभावयेत्तत् ।

मंता निकाकीटपतङ्गशङ्खटौपधीदोषनिवारणाय ॥

Cikitsā-kalikā (Commentary)

दुग्धप्रमाणं तूष्णं हारीतेन

त्रिः पञ्चसप्तमगन्धाः प्रकुञ्चं पयसा सह ।

पिबन् कर्माङ्गवेनीरुक् पित्तवातकफान् जयेत् ॥ इति

Suśruta:

हारीतः

ज्वेदो गुडो मांसरसः पयांसि साम्लानि मूत्रं मधुसैन्धवं च ।

एते निरुहे विदुषा प्रयोज्याः काथश्च कल्को मदनात् फलं च ॥ इति

Aṣṭāṅgahr̥daya -

हारीतः

आविलं समलं नीलं घनपीतमथापि च ।

सक्षारं विच्छिन्नं चैव सासुहं तन्निगद्यते ॥

Ksarapāṇi

The sixth pupil in the brilliant batch trained in the medical lore by Ātreya is Kṣārapāṇi. He is also said to have compiled a Samhitā like his other co-students, but this work also has been lost to

us, but its availability upto the time of Vāgbhaṭa is inferrable because of the quotations that are given by him. Several other medical authors have also liberally quoted him.

Upajhya Madhukoṣa:

क्षारपाणिनाप्युक्तम्

ऊर्ध्वगामी नरैः पद्भ्यामधोगामी सुखातिवियम् ।

उभयं वस्त्रिसंजातः शोथो हन्ति न संशयः ॥

Vyākhyā-kusumāvalī:

यदाह क्षारपाणिः

यावत्कालं न सुप्तिस्त्यादात्रौ स्वप्नाद्यशोचितात् ।

ततोऽर्धमात्रं तत्कालं दिवास्वप्नो विधीयते ॥

Tattva-candrikā :

क्षारपाणिनाप्युक्तम्

द्रोणद्वयं तु सूर्यः स्यात् कुम्भ इत्यभिधीयते ।

Cikitsā-kalikā-vivṛtti :

वथा च क्षारपाणिः

यत्र दृष्टगुणं द्रव्यं संयोगे कापि नास्ति यत् ।

तस्माद् द्रव्यप्रमाणेन तत्कर्म विनिर्बोजयेत् ॥

Suśruta:

‘नित्यं मन्दज्वरः’ इत्यादिना क्षारपाणिप्रोक्तं वातवज्जासकलक्षणमपरे पठन्ति ।

Aṣṭāṅgahrdaya:

तदाह क्षारपाणिः

स्त्रीणामार्तवञ्चो गुल्मो न पुंसामुपजायते ।

अन्यस्त्वसृग्मञ्चो गुल्मः स्त्रीणां पुंसां च जायते ॥ इति

Thus we find that the galaxy of Atreya's disciples had each one of them to his credit a great treatise on Āyurveda which has come down to us only in fragment (with the exception of Agniveśa Samhitā and perhaps Bhela Samhitā) through the citations of other later authors. Further research scholars may however delight us with the unearthing of the works of the one or the other author and thus enrich the medical lore.

MEDICAL INSTITUTIONS IN ANCIENT INDIA—PART 1

CHAPTER I

UNIVERSAL EDUCATION IN ANCIENT INDIA

Before we begin the survey of the medical achievements and institutions of ancient India, let us first acquaint ourselves with the standards and spread of general education among the people during this period. No country could be medically advanced which is educationally backward and unless we can assure ourselves that the general educational level of the people in ancient India was reasonably high, we cannot feel sure that their medical institutions worked adequately.

Educational Systems and Institutions

The indigenous ideal of education in India has always been to treat it as a sacred process. That process activated the individual's inner growth, which could only be achieved by means of constant and close contact between the pupil and the teacher where the latter's personal touch and constant vigilance counted most in the pupil's education. Education itself was taken in its literal and true sense as the educating and developing of the latent capacities, potentialities and the personality of the pupil. It was therefore treated as a process of scientific development and not as a mere mechanical process operating on the basis of collective drill and training.

Conditions of life in Ancient India**Aryan Culture.**

The Aryans who first entered India were remarkable for their many virtues and strength of intellect. The Vedic Rsis not only composed hymns and performed sacrifices but fought their wars and ploughed their fields. Their martial spirit was for a long time kept alive by the necessity of holding their own against the enemy. The mild climate and fertile soil of the country bringing the means of subsistence within easy reach made the struggle for existence in India an easy one. Besides the lofty mountains and the seas shutting the country off for a long time from outside

influences gave the Indian culture a unique character. The peculiar environmental conditions of India have tended to make her people more meditative and philosophical.

The general condition of the country as a land of plenty and fertility, peaceful environments of the forest dwelling Ṛṣis, support of the princes and the rich to the cause of education in general, and the spirit of scientific research, inquiry, imagination and thinking on the part of the Ṛṣis, all these factors combined together contributed greatly to India's later greatness in the field of knowledge in general and art and science in particular.

The Rsi Scholars

From the very beginning of the Vedic period there appears on the field, a class of Ṛṣis who were the real exponents of Āryan culture and who devoted their lives to disinterested psychological and scientific inquiry in thinking, imagination, reasoning and generalisation.

These Ṛṣis were the proto-types of our modern scientific research scholars. These Ṛṣi scholars lived apart from the world in quiet forest retreats—ideal places for study, and meditated on and discussed the problems of life from different points of view from that of other people. Some one has justly remarked that India was a nation of scholars in old days as the west is a nation of scholars at present. The forest Āśramas (dwellings) gradually grew to be the centres of the highest Āryan learning. Though deeply absorbed in metaphysical studies, the Ṛṣis' experience of worldly life won them high reputation as teachers for the younger generation.

The ancient Āryan people who inhabited this country were gradually divided into four classes, the Brāhmaṇas or the priestly class, the Kṣatriyas or the martial class, the Vaiśyas or the agricultural and commercial class, and the Śūdras or the serving class.

The Brahmanas

The Brāhmaṇas (preceptor class) became the dispensers of

religion, of laws and of medicine. They exhibited a superiority of intelligence which, with the exception of the Greeks, is in vain looked for in other ancient nations. In ancient India, the Āryan literature was highly cherished and fully cared for by the princes and opulent individuals, for the patronage of literature and religion increased their temporal power and religious influence. Such encouragement operated powerfully as an incentive to the study and literary exertion of scholars. It was the endeavour of the influential class to encourage education and poetry as well as medicine and religion; the former enhancing the intellect of the rising generation and immortalising in verse the grandeur of their patrons; the latter explaining the treatment of the body in health and disease and the means of ensuring happiness to the individual after death.

The first three classes of people were compelled to undergo a long period of rigorous studentship; the compulsion was not governmental but a far stronger one—the compulsion of religiousocial convention. It was unthinkable for a member of these three classes, known as Dwijas (द्विज) or twice-born, to evade the obligation to study, which was enforced both as a matter of religious duty as well as social convention. Any violation of this obligation brought upon the offender the terrible penalty of being declared an outcaste (Vrātya व्रत्य) and debarred from all the privileges of a member of the Āryan community. As regards the members of the fourth class, whose business it was to serve the other three classes, the obligation to studentship as in the case of the three twice-born classes did not exist, but it would be a mistake to assume that the educational needs of this class were neglected. In fact with the exception of the Vecas, a member of the Śūdra class could be and frequently was highly educated as any of the upper three classes; Vidura (विदुर) and Sūta (सुत) are but the supreme instances of the culture and enlightenment that prevailed in the whole class. The value of knowledge and consequently of education was fully realized by the early ancestors of our race whom we have come to know as Ṛṣis or seers. In the words of one of these the great author of the Caraka Saṃhitā:—

समग्रं दुःखमायत्तमविज्ञाने द्रयाश्रयम् ।

सुखं समग्रं विज्ञाने विमले च प्रतिष्ठितम् ॥

च. सू. ३०, ८४

‘All ills of humanity are rooted in ignorance and all progress and happiness in unclouded knowledge.’

Knowledge was indeed so highly prized by these R̥sis that they dedicated their whole lives to the pursuit of learning, living in forest hermitages away from the distractions of the world. It was their firm faith that if man was ever to attain immortality it was through knowledge alone (विद्ययाऽमृतमश्नुते). They loved knowledge above all things, above even kingship and wealth. Thus when Yama (यम), God of death gives the boon of an incredibly long life, with all the appurtenances of luxury and opulence, to the young student, Naciketas (नचिकेतस्) the latter declines the gift with the saying that the soul of man is not satisfied by material acquisition (न वित्तेन तर्पणीयो मनुष्यः) and insists on knowing the answer to the riddle of man's survival of his bodily death. The wife of the sage Yājñavalkya (याज्ञवल्क्य) speaks in a similar vein when her husband prior to leaving her, offers to bequeath her his earthly possessions.

Says “she If you give me the whole earth with its riches. would it make me immortal ?” on the sage replying that there is no hope of immortality through wealth (अमृतत्वस्य नाशस्ति वित्तम्) the high souled Maitreyī announces that she has no use for such perishing gifts and wishes to be taught the secret of immortality.

Such then was the value our early ancestors as seen from the above-mentioned Maitreyī (मैत्रेयी) story, set on the acquisition of knowledge. They considered the achievement of knowledge and through it that of immortality or deliverance of the soul from the cycle of births and deaths, as the final end of human existence (न विद्या या विमुक्तये) and human existence they regarded not as the expression merely of a coming together of material atoms but as the expression of a unique assemblage of body, senses, mind and soul as Caraka puts it (शरीरेन्द्रियमरसात्मसंयोगः). Consistently with this view of man's nature and destiny, the R̥sis evolved a system of education

which was education in the true sense of the word. It was an education, which had for its aim the educating or the drawing out of the latent capacities and potentialities of the whole man in the individual. It sought to build up the whole man and enable him to lead as good and useful a life as possible according to the existing conditions of time and place. It was an education which aimed at securing for its votary his well-being both here and hereafter as is claimed for the science of Āyurveda by its author.

वक्ष्यते यन्मनुष्याणां लोकयोरुभयोर्हितम् ॥ च. सू. १, ४३

"It is the Science of Life which teaches mankind what constitutes their good in both the worlds."

No wonder then that education meaning as it did sole means of man's realization of his immortal destiny, was invested with the highest sanctity.

These ideals of education were translated into actual practice and during the long era of the golden age of Āryan culture extending over two thousand years an elaborate educational organization was built up which succeeded in making the highest fruits of education available to the humblest member of the society.

This marvellous achievement was made possible not by recourse to State aid or compulsion but by the establishment of a religio-social convention which made it incumbent for every member of the Āryan community to receive a thorough education.

This fact of universal education and righteous living is amply borne out by the passage in the Chāndogya Upaniṣad (छांदोग्य-उपनिषद्) where king Aśwapati (अश्वपति) of Kekaya (केकय) claims that " न मे स्तेनो जनपदे न रुद्रयो न मयपो नानाहिताग्निर्विद्वान् न स्वैरो स्वैरिणी । 'छा. उ. ' ५-११-५ 'in my dominion, no villain, no drunkard, none who neglected his religious rites, none uneducated, no man incontinent and gay as libertine, no woman who was unchaste, existed."

As a matter of fact it was considered the religious duty, of every father to educate his son. The Brhadāranyaka Upaniṣad

(बृहदारण्यक-उपनिषद्) lays down that (तस्मात् पुत्रमनुशिष्टं लोक्यमाह । तस्मादेनमनुशास्ति । 1-5-17) "Therefore they speak of an educated son as being conducive to the world. Hence the father teaches his son."

The faculty that enabled the rich as well as the poor to launch on an educational career was the absence of the compulsion to pay any fee at all or at least to begin with. At the end of his career of education, the disciple could, out of his own choice, make suitable payment of fee to his preceptor. In a society consequently where the love of knowledge and of service to the fellow man was held so highly, and every one was educated, it is but natural that the medical science should have drawn the flower of society to itself and should have made use of it for the advancement of human welfare.

This glorious state continued at least up to the seventh century A. D. and not only were the teaching institutions spread through the length and breadth of the country as the Chinese traveller Yuan Chwang has depicted, but more important still was the general attitude of the cultured classes in regard to the filtering down of the essence of culture to the millions of the masses with a purely philanthropic motive.

CHAPTER II

THE PURPOSE OF THE STUDY OF MEDICINE

Outlining the objectives or ends which medical education subserves, Caraka says—

स चाध्येतन्यो ब्राह्मणराजन्यवैश्यैः । तत्रानुप्रदार्थं प्राणिनां ब्राह्मणैः, आरक्षार्थं राजन्यैः वृत्त्यर्थं वैश्यैः सामान्यतो वा धर्मार्थकामपरिग्रहार्थं सर्वैः ।

तत्र यदध्यःत्मविदां धर्मपथस्थानां धर्मप्रकाशकानां वा मातृपितृभ्रातृवन्धुगुरुजनस्य वा विकारप्रशमने प्रयत्नवान् भवति, यस्यायुर्वेदोक्तमव्यात्ममनुष्यायति वेद्यत्यनुष्ठीयते वा, सोऽस्य परो धर्मः; वा पुनरीश्वराणां बलुमतो वा सकाशात् सुज्ञोपहारानमिता भवत्यर्थावित्तिरक्षणं च, या च स्वपरिग्रहीतानां; प्राणिनामातुर्यादारक्षा, सोऽस्त्वर्थाः

यत् पुनरस्य विद्वद्ग्रहणयशः शरण्यत्वं च, या च संमानशुभ्रा, यत्प्रेष्ठानां विषयाणामारोग्य-
माप्ति, सोऽस्य कामः । इति वयाप्रसमुक्तमशेषेण ॥ २९ ॥

“This science is to be studied by the Brāhmaṇas, the Kṣatriyas and the Vaiśyas. By the Brāhmaṇas with a view to benefiting all creatures, by the Kṣatriyas as subserving their role of protectors and by the Vaiśyas as a means of livelihood; and in general, by all with the object of attaining virtue, wealth and pleasure.

Now whatever endeavour a practitioner of this science makes towards the relief of the ailments affecting those who walk in the path of righteousness, or those who propagate righteousness, or of such persons as his mother, father, brothers, relations and seniors or in whatever measure he meditates on, expounds or practises the spiritual truths enshrined in this science of life all—that constitutes the higher virtue of his life.

Again whatever store of wealth or patronage he is able to secure from his association with kings and merchant-princes with a view to ensuring for himself an easy and comfortable life, or whatever relief from distress he himself is able to extend to those who have sought his protection—all this constitutes the wealth of his life.

Once again, whatever renown comes his way, acclaiming him as a sage, or as a saviour, or whatever honours and services he commands, or whatever measure of health is able to confer on those whom he loves—all this constitutes the satisfaction of a medical man's life. Thus we have dealt with all the points raised without omitting anything.’

Dealing with this question as to why medicine should be studied, another early master Kaśyapa, declares:—

तत्रार्थपरिज्ञानार्थं पुण्यार्थं चात्मनः प्रजातुप्रहार्यं ब्राह्मणैः प्रजासंरक्षणार्थं क्षत्रियैः दृष्ट्यर्थं वैश्यैः
शूद्रपार्याप्तैः धर्मार्थं च सर्वैः । सुखजीवितदानं हि सर्वधर्मस्याधिकं ब्रुवते;

का. सं. पृष्ठ ४२.

‘Medicine should be studied by the Brāhmaṇa for the sake

of the knowledge of truth, of acquiring spiritual merit for himself and of extending help to humanity; by the Kṣatriya for the sake of safe-guarding the health of the people; by the Vaiśya for the sake of a livelihood; and by the rest for the sake of service. All may study it for the sake of living the good life."

In another great classic, the Suśruta Saṃhitā, we find Suśruta approaching the great Dhanvantari with the request:-

तेषां सुखार्थेऽपि रोगोपशमायैमात्मनश्च प्राणयानार्थं प्रजाहितहेतोरायुर्वेदं श्रेतुमिच्छाम इहोपदिश्य-
मानम् : अत्रायतमैहिकमायुष्मिकं च श्रेयः तद्भूगवन्तमुपपन्नाः स्मः शिष्यत्वेनेति ॥ ४ ॥

सु. सू. अ. १

"For the sake of affording relief from suffering to humanity in its pursuit of happiness, for the sake of prolonging our own lives and for the sake of general good of the people, we would like to hear the Science of Life from which accrues to man his good both here and hereafter. It is for this that we are here as your disciples."

In the same book, we again find Dhanvantari declaring-

वत्स सुश्रुत इह सत्त्वायुर्वेदप्रयोजनं—व्याव्युपसृष्टानां व्याधिपरिमोक्षः स्वस्थस्य रक्षणं च ॥

सु. सू. अ. १. १४

"The purpose of the medical science is release from suffering to those who are in the grip of disease and maintenance of wellbeing as regards those who are healthy".

He further defines Āyurveda thus-

तदिदं शाश्वतं पुण्यं स्वर्ग्यं यदास्यामायुष्ये वृत्तिकरं चेति ॥ १९ ॥

सु. सू. अ. १.

"Medical science is eternal, sacred and bestower of heaven, fame, longevity and subsistence."

From these references it can be seen that there were three main objectives which induced people to take up the study of medicine. The first objective, which is the one that is generally the sole objective in this commercial age, is the earning of a livelihood (वृत्ति), and the people that took up the medical calling from this incentive were in those days naturally recruited from the Vaiśya or the merchant class. The second objective was the acquisition of fame

and prestige and the people to whom this objective had the strongest appeal were chiefly from the Kṣatriya or Rājanya class, characterized by bold, authoritative and adventurous spirit. Some of these were reigning princes and were able to spread the fruits of their medical knowledge to whole populations, and their bold, heroic and enterprising spirit may have initiated many bold experiments, especially in surgery. It is from this type of medical students that the consultant and the specialist would be drawn. The third and the most important class of people was that which took up the study of medicine with the objective of the pursuit of knowledge for its own sake or of serving humanity from motives of mercy and philanthropy. This class came mainly from the Brāhmanas and it is mainly from this class that the teachers, research scholars and missionary doctors were recruited. Later this spirit of service and philanthropic zeal received further impetus from the ethical teaching of the Buddha and a large band of Buddha Sādhus arose who dedicated their lives to charitable works and the spread of the medical knowledge of India not only to greater India but to the far corners of the then-known world.

The remarkable progress of medicine during the golden age of Āyurveda was due to the selfless and pioneering spirit evinced by Brāhmaṇa teachers and the Buddhist Sādhus. This spirit which has unfortunately been on the wane in India for a long time, emerging in other parts of the world, has gained for them that supremacy in knowledge and science which India once enjoyed. With the return of freedom to India, the old spirit also is sure to return and restore her to her original high status.

All these three classes of medical practitioners, though motivated by different impulses, shared in common the three-fold ideal of human life, namely Dharma (धर्म), Artha (अर्थ) and Kāma (काम), and though each worked in its own particular way, they all served the country and in greater or lesser measure enhanced its well-being and glory.

CHAPTER III

SELECTION OF THE SYSTEM AND BRANCH OF STUDY BY THE MEDICAL STUDENT

In ancient times, like in our own days, the study of medicine pre-supposed a certain standard of general education, intelligence and character in the student. Besides, the person choosing the medical line was required to be possessed of a sense of discrimination and the proper value of things. For instance, he was expected before launching upon his course of studies, to weigh in his mind the various aspects of his undertaking such as the adequacy or otherwise of his educational, physical and intellectual equipment, the nature of his inclinations and aspirations, the difficulties and strain involved in the pursuit of the science, the reward that awaits him at the end of the studies and privileges attached to the profession, and the circumstances of place and time; all these aspects had to be fully considered before the student decided in favour of starting his medical education. These aspects pertain to the student's own circumstances, both of his internal and external self. The circumstances of place and time would mean that he should give due consideration to the nature of the country and the social and economic conditions of the people and the diseases prevalent and likely to prevail there and the climatic conditions of the country. 'Time' would mean the nature of the times i. e. the habits, taste and requirements of the times as well as the student's own age and the period of time that it might take to complete his course of studies.

Caraka declared:-

बुद्धिमानात्मनः कार्यगुहाघवं कर्मफलमनुबन्धं देशकालौ च विदित्वा युक्तिदर्शनाद्
मिथुबुधः शास्त्रसेवादितः परीक्षेत । च. वि. ८-३

"The intelligent man who after an appraisal of the task whether it will prove heavy or light, of the rewards, the obligation, time and place, finds himself suited for the medical profession, should first of all select a treatise of that science".

The first part that we have described is subjective part and then comes the objective part of the consideration to the choice he is to make of the particular system of medicine. For as we shall see there were many schools of medical thought obtaining in India then. There were obviously many treatises in vogue each pertaining to a

particular system or school of thought. The period when medical science achieved its highest development was one of great intellectual awakening in India. Her philosophy and science attained their highest pinnacles at that time. Naturally enough the variety in her philosophical thought must have been mirrored in her medical speculations as well. These must have been followed by a practical and constructive effort at synthesis resulting in the codification of all the knowledge and material available so as to form a universally acceptable compendium of the science. The Caraka and Suśruta Samhitās for instance are examples of such universally acceptable and accepted compendiums. From this it is evident that before this happened, there were many and various systems and their traditional expositions in the form of scholastic traditions coming down from teacher to the student through many generations. Therefore the student had to ponder deeply before he made his choice and Caraka describes the various aspects of the question that such a student had to fully consider before fixing up any one of the treatises as being fully fit for study.

Thus says Caraka:-

विविधानि हि शास्त्राणि भिषजां प्रचरन्ति लोके; तत्र यन्मन्येत सुमह्यशस्त्रिधीः पुरुषासेवित-
मर्थबहुलमाप्तजनपूजितं त्रिविधशिष्यबुद्धिहितमपगतपुनरुक्तदोषमार्गं सुप्रणीतसूत्रभाष्यसंग्रहकम् स्वाधारमनवप-
तितशब्दमकण्टशब्दं पुष्कलाभिधानं क्रमागतार्थमर्थतत्त्वविनिश्चयप्रधानं संगतार्थसंकुलप्रकरणमाहुप्रबोधकं
लक्षणवच्चोदाहरणवच्च, तदभिप्रपद्येत शास्त्रम् । च. वि. ८-३

“Many treatises of medicine are current in the world. From among these he should choose that treatise which has obtained great popularity and is approved by wise men, which is comprehensive in scope, held in esteem by those who are worthy of credence, suitable alike for the understanding of the three grades of students (very intelligent, moderate and slow), free from the faults of repetition, revealed by a seer, arranged in well made aphorisms, commentary and summary, well authenticated, free from vulgar usages and difficult words, rich in synonyms; possessing words of traditionally accepted sense, concerned mainly with determining the true nature of things relevant to the theme, orderly in its arrangement of

topics, rapidly elucidating and enriched with definitions and illustrations. Such a treatise is to be chosen."

Above all, the student was to be inspired by a realistic and practical spirit. He should make himself useful to the society and find his own fulfilment too in the science. There was to be no blind undertaking or taking a leap in the dark, led by mere high-sounding phrases, or guided by mystical idealism that was never to lead to material results. Such an undertaking cost many a heart-pang in the later days of a student when he was face to face with the 'hard and prosaic facts' of life. He feels aggrieved with the world for its indifference to such a fine and spiritual enterprise as his. But the world will always judge things by their practical results. Hence a realistic and objective outlook is needed to help the student in choosing his future and Āyurveda lays special emphasis on this realistic spirit that should inspire the student's choice and undertaking.

CHAPTER IV TEXT BOOKS OF MEDICINE

The period of the compilation of the Āyurveda Samhitā will remain a subject of controversy and research for a long time to come, but we can broadly put the period as running concurrently with the Samhitā period of the Vedas themselves. It is likely that it was compiled as a branch (उपङ्ग) of Atharvaveda, as we find the last named Veda full of medical references, although the oldest Rg-Veda (ऋग्वेद) also contains many clues to enable us to say that medical science was well advanced even in those days of the hoary past. In any case the compilation was a comprehensive text on the Science of Life. It included all the knowledge of life in health and disease, accumulated during thousands of years of Vedic period over the length and breadth of the land. It seems to be a systematised compilation as it is said to be divided in 1000 chapters, each chapter containing 100 verses, thus making one hundred thousand verses in all. This science of Āyurveda was regarded as त्रिकंठ or tri-based. It gave dominance to positive health or स्वस्थता as stated in Caraka.

हेतुलिङ्गोद्यमज्ञानं स्वस्थानुरपरायणम् । त्रिसुप्तं शायतं पुण्यं बुबुधे यं पितामहः ॥२४॥

सोऽनन्तपारं त्रिकण्ठमायुर्देदं महामतिः । यथावद्विशास्त्रं बुबुधे तन्मना मुनिः ॥ २५ ॥ च. सू. १

इह सत्वायुर्वेदो नामोपाङ्गमथर्ववेदस्यानुत्पाद्यः प्रजाः श्लोकशतसहस्रमध्यायसहस्रं च
कृतवान्स्वयम्भुः ततोऽरुणायुर्वेदमल्पमेवस्त्वं कालोक्य नराणां भूयोऽष्टवा प्रणीतवान् ॥ ६ ॥ बु. सू. १

"He taught the science of causes, symptoms and medication, the supreme refuge of both the healthy and the ailing, the tripartite science eternal and holy, which the Great Father Brahmā knew.

He, the sage of great understanding, soon learned correctly, by single-minded devotion the whole science of life, tri-based and extending without end."

"This science known as Āyurveda is a branch of Atharva-veda. The self-created Brahmā before creating man, first formulated this science of life consisting of a hundred thousand verses and a thousand chapters. But in view of the shortness of life and the feebleness of understanding of mortals, he again divided the knowledge into eight parts."

Thus with the progress of time and of the science, specialization in each of its branches became a necessity and we find that this science of life acquired the name of Aṣṭaṅga-Āyurveda (अष्टाङ्ग आयुर्वेद) from the eight different specialized branches into which it developed. This term is still applied to it.

The eight branches are enumerated by Caraka as under:-

तस्यायुर्वेदस्याष्टाङ्गोऽयम्-तज्ज्या, कायचिकित्सा, शालाक्यं, शल्यपहर्षकं, विषगद्वैरोधिः
प्रशमनं, भूतविद्या, क्षीमारभ्यस्यनं, रसायनं, वाजीकरणं इति च. सू. ३०-२८

"The branches of this science are eight They are:-(1) Medicine, (2) The science of the special diseases of the supra-clavicular parts of the body (viz. eye, ear, nose, mouth, throat etc.) (3) Surgery, (4) Toxicology, (5) Psycho-therapy, (6) Pediatrics (7) Rejuvenation and (8) Virilification."

Before the actual division of the Science of Āyurveda into its eight branches named above there were many treatises written by sages on the subject of Āyurveda in general. The following is a list of them.

Brahmavaivarta Purāṇa (ब्रह्मवैवर्तपुराण) mentions various authors and their respective works thus:

धन्वन्तरिः— चिकित्सातत्त्वविज्ञानम्
 दिवोदासः— चिकित्सादर्शनम्
 काशिराजः— चिकित्साकौमुदी
 अश्विनीसुतौ— चिकित्सासारतन्त्रम्
 भ्रमघ्नम्
 नकुलः— वैद्यकसर्वस्वम्
 सद्देवः— व्याधिसिन्धुविमर्दनम्
 यमराजः— ज्ञानार्णवम्

च्यवनः— जीवदानम्
 जनकः— वैद्यसन्देशमञ्जनम्
 चन्द्रसुतः— सर्वसारम्
 जाबालः— तन्त्रसारकम्
 जाजलिः— वेदाङ्गसारम्
 पैलः— निदानम्
 करथः— सर्वधरम्
 कुम्भसम्भवः— द्वैधनिर्णयतन्त्रम्

The names of these authors are found quoted in later works which are available at present. But unfortunately the original works lie hidden in darkness, which one day the future research-worker may bring to light.

Āyurveda is essentially an Āryan product and it expanded with the expansion of Āryan sway and culture over the country. The knowledge became scattered over the country. Centres of learning sprang up in different places which however could not have been quite isolated as they preserved a unity of culture which can only come from regular inter-communication. But despite this basic unity, a practical science has to develop in different places according to their special requirements and condition of life. For scores of centuries Āyurveda developed in this manner, its wisdom being handed down in the form of aphorisms by word of mouth.

CARAKA SAMHITA

This must have resulted in a lot of confusion and a clash of authorities; for want of a permanent and standardised form this learning of immense value would have faded away like so many other sciences whose fragmentary results remain to this day to astound but not to edify. Fortunately for Āyurveda in about seventh century. B. C. we come across the great event in the history of medicine. For about 7th century B. C. we come across a great event in the history of Āyurveda—An all Aryāvarta Āyurvedic Congress was held in the vicinity of the Himālayas where even the

representatives of foreign countries were invited and consulted. The records of proceedings were handed over to six secretaries to classify, arrange and prepare the text of all deliberations and discussions in a systematic way.

The secretaries collected all the Āyurvedic knowledge existing at that time, collated and compiled a text in a coherent system in a scientific terminology. These texts were presented before the committee of the expert Ṛṣis and they approved the work prepared by Agniveśa as the authorised text.

This compilation of Agniveśa popularly called the Caraka Samhitā is thus the product of this great meeting of savants.

SUSRUTA SAMHITA

Contemporary with Caraka, another great man arose at Benares who did the same for surgical knowledge as Caraka did for the medical. He compiled the Suśruta Samhitā.

Caraka and Suśruta Samhitās are written with clearness, conciseness and simplicity of arrangement and may be regarded as compendiums of the knowledge of medicine possessed at the time.

All that was necessary for an ordinary medical practitioner was collected in one volume, Caraka's being a volume of study for the physician and Suśruta's for the surgeon. Each book contains in addition to description of medicine and surgery, the description of anatomy, physiology, toxicology, psycho-therapy and personal hygiene, medical ethics and many other things which may be useful for a medical practitioner. Each can be considered an encyclopedia of medical literature of the times.

Caraka and Suśruta stabilised the floating mass of medical knowledge so to say of the times and supplanted all other works. Caraka and Suśruta are not the first books in medicine. But the reason why we do not come across any book on the subject of prior date is that these master-pieces eclipsed all other books which gradually faded out of existence.

These two memorable works appear at about the beginning of what may be called the golden age of Indian culture. This age may roughly be said to be from 2700 B. C. to 600 A. D. During this period the true scientific spirit was abroad in the land. The quest for knowledge had taken different directions. Philosophy, astronomy, mathematics, trigonometry, music, and administration, were among the branches of knowledge whose foundation was laid in this period and also considerably developed. There were Universities like the well known ones of Taxila, Benares and Nālandā, for dissemination and exchange of knowledge. There were great Ācāryas (Professors) of different subjects and those who keenly desired to learn at their feet travelled long distances like true devotees of Saraswati and sought their Āśramas. During this period of intense intellectual activity it is but natural that the science of life and healing should attract the greatest attention. Āyurveda is a product of that golden age of Indian History. The Caraka and Suśruta collections prove that a vast amount of scientific research, patient investigation and experimentation must have gone before the conclusions embodied in them. These must have covered a very wide range as the vast country provided a variety of climate and geographical conditions. We have altitudes ranging up to 5 miles. We have almost rainless regions to those having 500 inches a year. We have coldest and hottest possible regions. We have six clear-cut periodical seasons each producing its distinctive vegetation. All these climatic and geographical variations affected bodily condition and its reaction to attacks of disease and to different kinds of medicines. The country with such enormous variabilities of climate and with such wonderful range of mountains as the Himālayas the Vindhya and the Ghats was a rich nursery for the growth of all kinds of vegetable life. It provided a vast field for botanical research. Thousands of medicinal herbs or their products growing in diverse parts of the country in different climates are mentioned in Caraka and Suśruta. Diseases peculiar to different localities and seasons find a place in these books. There is no doubt that they represent not a local system of medicine but one which was recognised throughout India.

Many authors specializing in one or the other of the branches, wrote on their specialized subject as is evident from the following extracts.

विविधानि हि शास्त्राणि भिषजा प्रचरन्ति लोके ।

च. वि. ८-३.

“Many treatises of medicine are current in the world”.

अथ भेलादयश्चकुः सर्वं स्वं तन्त्रं कृतानि च ।

श्रावयामासुरात्रेयं सर्वसङ्गं सुमेधसः ॥ च. सू. १. ३३

“Thereafter, Bhela and the rest made each his compilation of the science and these talented ones read them out to Ātreya and the assembly of sages”.

औपधेनवमौरभं सौश्रुतं पौष्कलावतम् ।

शेषाणां शल्यतन्त्राणां मूलान्येतानि निर्दिशेत् ॥ सु. सू. ४, ९.

“The Śalya-tantras of Upadhenu (उपधेनु), Urabhra (उरभ्र), Suśruta (सुश्रुत) and Puṣkalāvata (पुष्कलावत) are the sources of the other Śalya-tantras”.

In the extracts cited above and from many other sources we learn the names of several authors on the various branches but unfortunately most of the works are lost into oblivion and are not available at present. We only hope that extensive researches of the future may enable us to find this lost treasure.

The list of the names of the then extant works in each subject as referred to in later works is as under:—

कायचिकित्सातन्त्राणि

- (१) अग्निवेशसंहिता
- (२) भेलसंहिता
- (३) जतुकर्णसंहिता
- (४) पराशरसंहिता
- (५) क्षारपाणिसंहिता
- (६) हारीतश्मसंहिता
- (७) खरनादसंहिता
- (८) विश्वामित्रसंहिता
- (९) अगस्त्यसंहिता
- (१०) अत्रिसंहिता

शल्यतन्त्राणि

- (१) औपधेनवतन्त्रम्
- (२) औरभ्रतन्त्रम्
- (३) सौश्रुततन्त्रम्
- (४) पौष्कलावततन्त्रम्
- (५) वैतरणतन्त्रम्
- (६) भोजतन्त्रम्
- (७) करवीर्यतन्त्रम्
- (८) गोपुररक्षिततन्त्रम्
- (९) मालुकीयतन्त्रम्
- (१०) कपिलतन्त्रम्
- (११) गौतमतन्त्रम्

शालाक्यतन्त्राणि

- (१) विदेहतन्त्रम्
- (२) निमित्ततन्त्रम्
- (३) काङ्कयतन्त्रम्
- (४) गार्धतन्त्रम्
- (५) गालवतन्त्रम्
- (६) सात्यकितन्त्रम्
- (७) शौनकतन्त्रम्
- (८) करालतन्त्रम्
- (९) चतुष्टयतन्त्रम्
- (१०) कृष्णात्रेयतन्त्रम्

भूनविद्यातन्त्राणि

- (१) सुष्टुते अमानुषप्रतिषेधाध्याये
- (२) चरके उ-मादचिकित्सिते
- (३) वाग्भटे भूतविज्ञानीयभूतप्रतिशेषाख्ययोरव्याययोः

कौमारभृत्यतन्त्राणि

- (१) जीवहतन्त्रम्
- (२) पार्वतकतन्त्रम्
- (३) बन्धकतन्त्रम्
- (४) हिरण्याक्षतन्त्रम्-काश्यपसंहिता

अगदतन्त्राणि

- (१) काश्यपसंहिता
- (२) अलम्बायनसंहिता
- (३) उशनःसंहिता
- (४) मनकसंहिता
- (५) लाट्यायनसंहिता

रसतन्त्राणि

- (१) पातञ्जलतन्त्रम्
- (२) व्याडितन्त्रम्
- (३) वसिष्ठतन्त्रम्
- (४) माण्डव्यतन्त्रम्
- (५) नागार्जुनतन्त्रम्
- (६) कक्षपुरतन्त्रम्
- (७) आरोग्यमञ्जरी

वाजीकरणतन्त्रम्

- (१) कौमारतन्त्रम्

- (१) शालिहोत्रसंहिता
(अष्टायुर्वेदविषया)
- (२) पालक्यसंहिता
(गजायुर्वेदविषया)
- (३) गौतमसंहिता
(गवयुर्वेदविषया)

Many more names are likely to be unearthed by the efforts of research workers in the field.

Text Books

The problem of selecting suitable text books out of a maze of a bewildering number of books worried the sylvan university heads of yore as much as it worries the modern text book committees. In those days meticulous care was taken in the selection of text books as is evident from the following extract from Caraka Samhitā—

विविधानि हि शास्त्राणि मिषजां प्रवरन्ति लोके; तत्र यन्मन्येत सुमहद्यशस्विधीरपुरुषासेवितमर्थ-
बहुलमाप्तजनभूजितं त्रिविधशिष्यबुद्धिहितमपगतपुनरुक्तदोषमात्रं सुपणीतसूत्रभाष्यसंप्रदकं स्वाधारमनवपतित-

शब्दमकष्टशब्दं पुष्कलाभिधानं क्रमागतार्थमर्थतत्त्वत्रिनिश्चयप्रधानं संगतार्थमसंकुलप्रकरणमाशुप्रबोधकं रक्षण-
वञ्चोदाहरणवच्च, तदभिप्रपद्येत शास्त्रम् । शास्त्रं ह्येवंविधममल इवादित्यस्तमो विधूय प्रकाशयति
सर्वम् ।

"Many treatises of medicine are current in the world. From among these, he should choose that treatise which has obtained great popularity and is approved by wise men, which is comprehensive in scope, held in esteem by those who are worthy of credence, suitable alike for the understanding of the three grades of student (very intelligent, moderate and slow), free from the faults of repetition, revealed by a seer, arranged in well-made aphorisms, commentary and summary, well authenticated, free from vulgar usages and difficult words, rich in synonyms, possessing words of traditionally accepted sense, concerned mainly with determining the true nature of things, relevant to the theme, orderly in its arrangement of topics, rapidly elucidating and enriched with definitions and illustrations. Such a treatise is to be chosen. For, such a treatise like the unclouded sun, dispelling darkness, illumines everything".

The selection, sanction and authorization of the text books were entrusted to a committee of learned professors who heard, together in a group, the whole of the text books and then approved the one which was the best. The approval rested purely on the merit of the substance of the text book. They declared it as approved and only then the book became an authoritative text book in the country. The following interesting verses throw light on the process of authorization of text books.

अथ मैत्रीपरः पुण्यमायुर्वेदं पुनर्वसुः ।
शिष्येभ्यो दत्तवान्ण्डभ्यः सर्वभूतानुत्पद्यते ॥ ३० ॥
अग्निवेशश्च मेल(ड)श्च जतुःर्णः पराशरः ।
हारीतः क्षारपाणिश्च जगृहस्तन्मुनेर्वचः ॥ ३१ ॥
बुद्धेर्विशेषस्तत्रासीन्नोपदेशान्तरैः मुनेः ।
तन्त्रस्य कर्ता प्रथममग्निवेशो यतोऽभवत् ॥ ३२ ॥
अथ मेलादयश्चक्रुः स्वं स्वं तन्त्रं कृतानि च ।
श्रावणामासुरात्रेथ सविंसं सुमेधसः ॥ ३३ ॥
श्रुत्वा सूत्रणमर्थानामृषयः पुन्यकर्मणाम् ।
यथावत्सूत्रितमिति प्रहृष्टास्तेऽनुमेनिरे ॥ ३४ ॥

"Therefore Punarvasu, the most benevolent, moved by compassion for all creatures, bestowed the science of life on his six disciples. (30). Agniveśa, Bhela, Jatukarna, Parāśara, Hārta and Kṣārapāṇi received the teaching of that sage. (31). It was the excellence of his own understanding and not any difference in instruction by the sages whereby Agniveśa became the foremost compiler of the science. (32). Thereafter Bhela and the rest made each his own compilation of the science and these talented ones read them out to Ātreya and the assembly of the sages. (33). The sages having listened to the presentation of the subject of these holy men, rejoiced acclaiming that the science had been truly presented. (34). All of them, pursuant of the welfare of all creatures exhorted the authors, exclaiming together, 'Great is your compassion for creatures'. (35) The celestial sages together with the immortals stationed in heaven, heard that auspicious cry of the great sages and hearing it rejoiced greatly. (36). "O ! well done,' that ovation, generous and profound echoed with joy by all creatures in the sky, resounded throughout the three worlds. (37). The winds blew salubriously; all the quarters expanded with radiance and divine showers of blossoms together with rain descended. (38). Thereafter the goddess of Enlightenment, Understanding, Achievement, Memory, Genius, Resolution, Eloquence, Forgiveness and Compassion entered into Agniveśa and the rest. (39). The compilations of these disciples which were thus approved by the great sages obtained currency in the world for the well-being of the multitudes of living beings. (40)."

The texts or these Samhitās were prepared in such a way that they served as complete works of reference to the students of ordinary intellect while they gave impetus for further research and progress by showing the line of research to the highly intellectual student.

एतावन्तो ह्यलमल्पबुद्धीनां व्यवहाराय, बुद्धिमतां च स्वालक्षण्यानुमानयुक्तिकुशलानामनुकार्य-
ज्ञानायेति । च. सू. ४, २०.

"This is quite adequate for the mediocre for the practical purpose of treatment, and for the highly intelligent who are proficient in the art of inference from innate qualities, it will serve as a

guiding principle for the comprehensive knowledge of drugs not mentioned here."

As we have said elsewhere, the advancement of science necessitated specialization of the various branches. The books written on the specialized branches no doubt gave dominance to their particular branch, but they never ignored the other branches; the basic knowledge of all other branches was also included in the book rather in a concise form as is but natural.

इत्यूर्ध्वज्यूथगदैकदेशस्तत्रे निबद्धोऽयमशून्यतार्थम् ।

अतः परं भेषजसंग्रहं तु निबोध संक्षेपत उच्यमानम् ॥ च. वि. २६-१३३

"The local affections occurring in the upper supra-clavicular part of the body is described here in order to obviate the causes of an absolute omission of them in this treatise. Henceforth, listen to the excellent epitome of this therapeutics succinctly described".

Every branch evolved its technical terms and the knowledge of this terminology was essential.

अधीयानोऽपि शास्त्रेण तन्त्रयुक्त्या विना भिषक् ।

ना धगच्छति शास्त्रार्थानर्थान् भाग्यक्षये यथा ॥

च. वि. १२-४८

"A physician who is not conversant with the canons of exposition though he may be a student of many treatises will fail to grasp the meaning of these treatises just as a man fails to acquire wealth when fortune has deserted him".

It was desired of the student that he should study the prescribed book intensively. Intensive study of it would enable him to understand other books with greater ease.

एकस्मिन्नपि यस्येह शास्त्रे लब्धास्पदा भूतिः ।

स शास्त्रमन्यदप्याशु युक्तिज्ञत्वात् प्रबुध्यते ॥ च. वि. १२-४७.

"One who has acquired a good grasp of even one branch of this science will be able to acquire an understanding of the other branches as well, on account of his being well grounded in general principles."

If he studied the whole work, understood it well and made

use of it constantly, he was sure to have a successful career in life which would be in the interests of the patient as well as of himself.

इदमखिलमधीन्य सम्यगर्थान्

विमृशति योऽविमनाः प्रयोगनित्यः ।

स मनुजसुखजीवितप्रदाता

भवति धृतिस्मृतिबुद्धिधर्मवृद्धः ॥

च. सि. १२-५१.

“He who having studied this treatise in its entirety, gives due reflection to its contents with concentrated mind and constantly verifies his knowledge in practical work and has fully developed his powers of retention, recollection, discretion and righteousness becomes a bestower of happiness and life to men”.

Besides, the physician-to-be was required to study all these sciences under the expert guidance of professors of those sciences.

अन्यशास्त्रोपपन्नानां चार्थानामिदोपनीतानामर्थवशात्तेषां तद्विद्येभ्य एव व्याख्यानमनुव्रोतव्यं, कस्मात् ? न ह्येकस्मिन्शास्त्रे शक्यः सर्वशास्त्राणामवरोधः कर्तुम् ॥ ६ ॥

एकं शास्त्रमधीयानो न विद्याच्छास्त्रनिश्चयम् ।

तस्माद्बहुश्रुतः शास्त्रं विजानीयात् चिकित्सकः ॥ ७ ॥

सु. सू. ४, ६-७.

“One should study the substance contained in other sciences which for some definite reason, is included in the text, under the learned men in the respective sciences. Why? Because it is not possible to include all the knowledge of different sciences into one treatise.”

“One who studies only one science does not acquire the real knowledge (in relation to other sciences). Hence a physician should be well versed in different sciences”.

Equal importance was given to the theoretical as well as practical knowledge.

यस्तु केव-शास्त्रज्ञः कर्ममपरिनिष्ठितः ।

स सुखत्यातुरं प्राप्य प्राप्य भीरुनिवाहवम् ॥ ४८ ॥

यस्तु कर्मसु निष्णातो चाष्ट्याच्छास्त्रबहिष्कृतः ।

स सत्सु पृथां नाप्नोति वधं चर्च्छति राजतः ॥ ४९ ॥

उभावेतावनिपुणायप्रमथौ स्वकर्मणि ।

अर्धवेदवावेतावेकपक्षाविव द्विजौ ॥ ५० ॥

सु. सू. ३, ४८-५०

“One who is well versed in the science but inadequate at practice is confused when facing a patient, just as a weak-hearted person is confounded when facing a battle. While one who is an expert at practical work but who is devoid of theoretical knowledge of the science, is not revered by the good persons and gets death-punishment from the king. Both such persons are inexpert, unable to perform their duties and know only half their science. They are like one-winged birds”.

Thus although the text books were complete, comprehensive and encyclopedic, they were not allowed to stagnate. These books were redacted or re-written or further specialized in a different group at intervals as demanded by the exigencies of time and place. New theories examined in the light of experience and experimentation were incorporated in the texts. Thus a number of redactions and commentaries came to be written to include and interpret the progressive knowledge in theory and practice of the science Agniveśa-tantra (अग्निवेशतन्त्र) was redacted twice, once by Caraka and then again by Dṛḍhabala (दृढबल).

Suśruta Samhitā (सुश्रुतसंहिता) and Kāśyapa Samhitā (काश्यपसंहिता) have undergone redactions.

At the end of the golden period of Āyurveda, the progressive spirit receives a set-back due to disturbed political condition, pre-occupation of the patrons of learning with war and defence and the general breakdown of the morale of the people, a result of the all-pervading sense of defeatism. Thus the decadence set in and the absence of sufficient facilities for study, unavailability of a sufficient number of preceptors, the general lassitude and lowering of the intellectual level and the general disintegration of cultural backbone tell the rest of the story.

Vāgbhaṭa, however, tries to stop the rot and to bring the

two prominent branches of medical science—medicine (कायचिकित्सा) and surgery (शल्यशास्त्र) together in one concise volume. He gives the reasons as follows—

तेषामेकैकमव्यापि समस्तव्याधिषाधने ॥ १२ ॥

प्रतितन्त्राभियोगे तु पुरुषायुषसंक्षयः ।

भवस्यध्ययनेनैव यस्मात् प्रेक्षः पुनः पुनः ॥ १३ ॥

तन्त्रकारैः स एवार्थः कश्चिद् कश्चिद्विशेषतः ।

अ. सं. सू. १, १२-१३.

“Each of them is not comprehensive enough with regard to the treatment of all diseases. And because the whole life of man passes away in studying each and every treatise with constant application and because the authors of treatises mention the same thing again and again although some topic is sometimes specially mentioned...”.

Vāgbhaṭa of Sind, who flourished about 7th century A. D. composed a treatise called Aṣṭāṅga Hṛdaya which while presenting a summary of Caraka and Suśruta with gleanings from Agniveśa, Bhela and Hārīta, brings the subjects up-to-date. He introduces a number of new drugs and makes valuable modifications and additions in surgery. He did all this in spite of strong opposition from orthodox school. Aṣṭāṅga Hṛdaya signifies the descriptions in 8 parts. It contains 7,444 verses in 120 chapters.

He also wrote another work called “Aṣṭāṅga-Saṅgraha”. Vāgbhaṭa's style is very clear and concise. He throws light on several obscure passages in his predecessors' works. Vāgbhaṭa was subsequently considered as great as Caraka and Suśruta. A popular couplet gives him the place of honour in Kaliyuga, just as Caraka and Suśruta had it in Kṛtayuga and Dwāpara respectively—a poetic but an impressive way of recognising the merits of this great man. Among the students of Hindu medicine, the three are known by the name of “Vṛddha Traya” or the ‘Old Triad.’

Redactors of Caraka, Suśruta and Kāśyapa as well as epitomizer Vāgbhaṭa, though they believed in the sanctity of the basic

principles of the text, were always alert to make progressive additions in the text, required according to time and place and were ever ready to assimilate the useful things from whatever source available. Caraka in unequivocal terms states:—

कृत्स्नो हि लोको बुद्धिमतामाचार्यः शत्रुश्चबुद्धिमताम् । अतश्चामिसमीक्ष्य बुद्धिमतामि-
त्रस्यापि धन्यं यशस्यमायुष्यं वैष्टिकं लौक्यमभ्युपदिशतो वचः श्रोतव्यमनुविधातव्यं चेति । च. वि. ८-१४.

“The entire world is the teacher to the intelligent and foe to the unintelligent. Hence, knowing this well, thou shouldst listen and act according to the words of instruction of even an unfriendly person, when they are worthy and such as bring fame to you and long life, and are capable of giving strength and prosperity.”

Not only this, but for the sake of gaining new knowledge, the R̥sis took the trouble of going even to foreign countries as Bharadwāja did.

दीर्घं जीवितमन्विच्छन्मरद्वाज उपागमत् ।
इन्द्रमुपतपा बुद्धा शरण्यममरेश्वरम् ॥ च. सू. १-३.

“Bharadwāja the mighty ascetic, in search of the science of Longevity approached Indra, having deemed him the lord of the immortals, worthy of suit.”

The ancient R̥sis valued knowledge to such an extent that they honoured Mlecchas as R̥sis and assimilated knowledge received from them.

म्लेच्छा हि यवनास्तेषु सम्यक् शास्त्रमिदं स्थितम् ।
ऋषिवत्तेऽपि पूज्यन्ते किं पुनर्देवविद् द्विजः ।

वृ. सं. २, १४.

“The Mlecchas or the Yavanas who are well versed in this science are respected even like R̥sis. Then what to say of the Dwija who knows the science of astrology?”

The true progressive spirit in compiling new text books is echoed in the statement of Vāgbhaṭa when he says:—

ऋषिप्रणीते ग्रीतिश्चेन्मुक्त्वा चरकमुश्रुतौ ।
मेडायाः किं न पठ्यन्ते तस्माद् ग्राह्यं सुभाषितम् ॥

अ. ह. उ. ४०, ४४.

“If the works of the ancient R̥sis alone are worthy of interest why are Bhela and such others not studied, leaving off Caraka and Suśruta? Therefore it is right that a good work should always be accepted”.

Orthodoxy seems to be strongly prevalent in his days and so Vāgbhaṭa seems to have been so exasperated that he condemns the obscurantism and anti-progressive spirit in strong terms thus:

वाते पित्ते श्लेष्मशान्तौ च पथ्यं
तैलं सर्पिर्माक्षिकं च क्रमेण ।
एतद् ब्रह्मा भाषतां ब्रह्मजो वा
का निर्मन्त्रे वक्तुमेदोक्षिशक्तिः ॥

अ. ह. उ. ४०, ८६.

“Oil, ghee and honey are respectively wholesome and curative of Vāta, Pitta and Kapha. What difference will be in the result whether it is prescribed by Brahmā himself or any other person created by Brahmā, this being not a subject of Mantra?”

Dr̥ḍhabala, Vāgbhaṭa, Mādhava, Śārṅgadhara and Bhāvamiśra clearly state that out of the best of knowledge related to this science from all the books extant and from all the sages, and after assimilating all worthy of it, they have compiled their volumes. The statements given below of only Dr̥ḍhabala and Vāgbhaṭa give full conception of the principles which governed the compilation of medical text-books.

कृत्वा बहुभ्यस्तन्त्रेभ्यो विशेषोऽल्लशिलोच्चयम् ॥ ३९ ॥
सप्तदशौषधाध्यायसिद्धिकल्पैरपूरयत् ।
इदमन्यूनशब्दार्थं तन्वदोषविवर्जितम् ॥ ४० ॥

च. वि. ३२, ३९-४०

“He added seventeen chapters in the Section on Therapeutics as also the two Sections of Pharmaceutics and Success in Treatment in entirety, by culling his data from various treatises on the science.

Thus this treatise is not deficient either in respect of diction or in respect of content, and is free from any blemishes besetting scientific treatises."

न मात्रामात्रमप्यत्र किञ्चिदागमवर्जितम् ।
तेऽर्थाः, स ग्रन्थवन्धश्च संक्षेपाय कमोऽन्यथा ॥

अ. सं. सू. १, ११.

सर्वतन्त्राण्यतः प्रायः संहत्याष्टाङ्गसंग्रहः ।
अस्थानविस्तराक्षेपपुनरुक्तादिवर्जितः ॥
हेतुलिङ्गीषधस्कन्धत्रयमात्रनिबन्धनः ।
विनिगूढार्थतत्त्वानां प्रदेशानां प्रकाशकः ॥
स्वान्यतन्त्रविरोधानां भूयिष्ठं विनिवर्तकः ।
युगानुरूपसदर्थो विभागेन करिष्यते ॥

अ. सं. सू. १, १५-१७.

प्रक्रमन्ते सर्वथा सर्वमुक्तं भवति सूचितम् ।
नहि लेखाभिधानेन लभ्यः सर्वार्थसंग्रहः ॥
अद्यत्वेऽपि विशेषेण भूततन्त्रार्थसंग्रहात् ।
संग्रहाद्यन्न बुध्येत तज्ज्ञानमतिदुर्लभम् ॥

अ. सं. उ. ५०.

"Not even a prosodial instant is introduced here without the authority of the traditional doctrine. The same are the interpretations and the same is the composition of the work; only the arrangement is changed for the sake of conciseness."

"Consulting all the main treatises, this treatise of Aṣṭāṅga-saṅgraha is compiled in various sections and chapters. It is free from improper prolixity, omission and repetition and is a treatise containing the tripartite science of life viz., etiology, symptomatology and medicament, is an elucidator of the parts the real meaning of which is obscure, it desists for the most part from the controversial points between our own and other treatises and is a composition just befitting the spirit of the age."

"A compilation becomes good if everything is fully described. If anything is left off, the significance of all-comprehensiveness is lost."

“Aṣṭāṅga-saṅgraha is up-to-date especially on account of the assimilation of the topics from a good many of the treatises. So what cannot be learnt from Sangraha must be an impossibility.”

अयुर्वेदोदधेः पारमपारस्य प्रयाति कः ।
विश्वव्याधौषधिज्ञानसारस्त्विष समर्थितः ॥

अ. सं. उ. ५०

“Who can reach the end of the boundless ocean of Āyurveda ? Here is collected the cream of the knowledge of the disease and drugs of the whole universe.”

तेभ्योऽतिविप्रकीर्णैभ्यः प्रायः सारतरोच्चयः ।
क्रियतेऽष्टाङ्गहृदयं नातिसंक्षेपविस्तरम् ॥

अ. ह. सू. १, ४.

हृदयमिव हृदयमेतत्सर्वायुर्वेदवाङ्मयपयोधेः ।
कृत्वा यच्छुभमाप्तं शुभमस्तु परं ततो जगतः ॥

अ. ह. उ. ४०, ८९.

“Aṣṭāṅga-hṛdaya neither too concise nor too copious is compiled, based on the extract of the essence of all the subjects scattered in various treatises. May the world enjoy full happiness from the merit which is obtained by compiling this Hṛdaya, the heart of the ocean of the literature of the whole of Āyurveda.”

The same principles guide the later authors in their compilations, viz., माधव, शार्ङ्गधर, भावमिश्र, चक्रपाणि, विजयरक्षित, श्रीकण्ठ, शिवदास and others.

Though each book was written on a special branch, the basic knowledge of all other branches was given rather in a concise form in each book.

इत्थुर्ध्वं जगत्प्रगदैकदेश-
स्तन्त्रे निबद्धोऽयमशून्यतार्थम् ।
अतः परं भेषजसंग्रहं तु
निबोध संक्षेपत उच्यमानम् ॥

च. वि. २६, १३३

“The local affections occurring in the upper supra-clavicular portion of the body are described here in order to obviate the censure

of an absolute omission of them in this treatise. Henceforth, listen to the excellent epitome of their therapeutics succinctly described."

Every branch had its technical terms and the knowledge of this technical terminology was essential.

अधीयानोऽपि शास्त्राणि तन्त्रयुक्त्या विना भिषक् ।
नाधिगच्छति शास्त्रार्थानर्थान् भाग्यक्षये यथा ॥

च. सि. १२, ४८

"A physician who is not conversant with the canons of exposition, though he may be a student of many treatises, will fail to grasp the meaning of these treatises, just as a man fails to acquire wealth when fortune has deserted him."

Now the selection, sanction and authorization of text books were necessary and they were given by a committee of learned professors who sat together and heard all the texts of various works and approved the one which was found the best, judging purely on the merit of the text book. They declared a book to be the best and it became an authoritative text book in the country. (Vide this Chapter अथ मैत्रीपरः पुण्यमायुर्वेदं पुनर्वसुः ।....यथावत्सूत्रितमिति प्रहृष्टास्तेऽनुमेनिरे ॥)

सर्वे एवास्तुवंस्तांश्च सर्वभूतहितैषिणः ।

साधु भूतेष्वनुकोश इत्युचैरब्रुवन् समम् ॥

* * * * *

तानि चानुमतान्येषां तन्त्राणि परमर्षिभिः ।

भ(भा)वाय भूतसंघानां प्रसिद्धां भुवि लेभिरे ॥

च. सू. १, २०-२५, ४०.

"All of them pursuant of the welfare of all creatures extolled the authors saying, 'Great is your compassion for creatures'."

"The compilations of these compilers which were thus approved by the great sages obtained currency in the world for the well-being of the multitude of living beings."

The qualities specified for a good text book are described in Caraka (Vide this chapter विविधान्.....तदभिप्रपद्येत शास्त्रम्)

शास्त्रं होरविषममल इवादित्यस्तमो विधूय प्रकाशयति सर्वम् ॥

च. वि. ८, ३

“Such a treatise, like the unclouded sun, dispelling darkness, illuminates everything”.

CHAPTER V

ADMISSION TO STUDIES

We shall now take up the subject of the considerations that governed admission to medical studies. We give below an exhaustive list of the qualifications required in a student of medicine and it is clear from its perusal that as much importance was attached to moral fitness as to physical and intellectual fitness. In fact the insistence on moral fitness was the greatest as can be seen from the fact that the vast majority of the required qualifications concern the ethical side of the student's personality. This insistence which is generally absent to-day, and the elaborateness with which it was set out in ancient days was no doubt due to the consideration that moral excellence is the very basis of all true education. But this is less readily ascertainable than intellectual and physical worth. This probably is the reason why moral fitness in students has gradually tended to be ignored, although the general decline in the standards of public and private morality cannot be denied its share. We should remember in this connection that the aim of all education, including medical education, was not to enable the student to earn a livelihood so much as to inculcate in him a love for the good life. As regards the practical difficulties in ascertaining whether a student had the necessary moral equipment, they did not exist, as under the ancient system of Gurukula education, the relation between the teacher and the pupil was as intimate as that between the father and the son. In fact, during the entire period of education, the teacher was actually in the place of the father, the pupil being fed, clothed and housed by him. Thus two of the most common names for a “Śiṣya” (शिष्य) or a student are “Antevāsin (अन्तेवासिन्—अन्ते समीपे वस्तुं शीलमस्य)। and “Chātra” (छात्र—गुरुदीपा-

च्छादनं छत्रम् ; तच्छीलमस्य) and both denote this intimate association; while the word "Ācārya" (आचार्य) signifies that his primary business was in helping his pupils to develop a sound character.

Great care was taken to see that no undesirable candidate got admission to studies. The universities of Vikramāditya, in the words of the Chinese traveller, were guarded scrupulously by the most erudite of scholars who held the examination for admission which was difficult to pass. The members of this admission committee were aptly called "Dwāra Paṇḍitas" (द्वारपंडित) whose business was to see that the standard of the University's scholarship was not lowered by the invasion of mediocrity.

That such strict selection was most important is seen from Caraka's statement that knowledge like a sword or water requires a clean repository:-

शस्त्रं शास्त्राणि सलिलं गुणदोषप्रवृत्तये ।

पात्रापेक्षीणि.....

च. सू. ९, २०

"Weapons, learning and water are wholly dependent for their merits or demerits on their holder."

As a result only two or three of them could have admission for studies. If the person possessing knowledge is unworthy of it, it is worse than useless and it is fraught with danger.

It was accordingly prescribed that before a prospective student was admitted to studies, he had to undergo a period of probation which extended from six months to one year. Thus we find Vāgbhaṭa saying in the Aṣṭāṅga Saṅgraha that it is only after the teacher has been fully satisfied of the character and worth of the candidates that the actual schooling should begin and this schooling once begun should continue till the student had mastered the subject both in theory and practice.

पणमासावुषितः शक्तो लज्जाशौचकलान्वितः ।

शिष्योऽध्याप्यो गतो यावदन्तं तन्वार्थकर्मणाम् ॥

अ. सं सू. २.

"A disciple who is capable and possessed of modesty, purity and arts and who has served a probationary period of six months, should be taught as long as he gains perfection in the theory and practice of the science."

Thus the danger of morally unworthy persons acquiring the power that comes through knowledge as well as the danger of incompetent or half-baked practitioners being let loose upon society are avoided. The system of probationary studentship, it should be pointed out, is not altogether absent in modern education; it obtains in certain western universities though the rules governing such probationership are neither so stringent nor so complete as those which obtained in the medical institutions of ancient India.

It is true that considerations of the caste (वर्ण) and lineage (गोत्र) of the candidate played an important role in the determination of his admission for the studies contemplated, but even here the underlying factor was purely one of moral worth. Thus in the famous story of Satyakāma (सत्यकाम), the son of a serving woman (Paricārinī-परिकारिणी), the teacher is confronted with the problem of deciding the eligibility of the boy who is unable to provide him with a Gotra (गोत्र) or paternal lineage but who is otherwise eminently fitted for the life of a student. The teacher concerned, who is no less a person than Uddālaka Āruṇi (उद्दालक आरुणि) decides that no one who was not a Brāhmaṇa could tell the truth so boldly as Satyakāma and accordingly commands him to fetch wood for the sacrificial fire, a token that he has been admitted to studentship.

It is clear from this story related in the Chāndogya Upaniṣad (छांदोग्य उपनिषद्) that only Brāhmaṇas were normally received as students by the great teachers of the day. This privileged position of the Brāhmaṇa in the sphere of learning continued for long, but in the course of time, Kṣatriyas and Vaiśyas were admitted in increasing numbers into what had been a jealously guarded preserve of the Brāhmaṇas, and later even the Śūdra as mentioned in Suśruta and Kāśyapa was considered eligible.

इदं हि कुलगुणसंपन्नं मन्त्रवर्जमनुपनीतमध्यापयेदित्येके ।

“Some say that one should coach up even a Śūdra possessed of good lineage and qualities withholding the instruction of Mantras and also the sacred thread.”

केन चाध्येय इति, ब्राह्मणक्षत्रियवैश्यशूद्रायुर्वेदोऽध्येयः ।

वा. सं. वि. पृ. ४०.

“By whom should Āurveda be studied? It should be studied by Brāhmaṇas, Kṣatriyas Vaisya and Śūdras.”

This gradual enlargement of what we may call the educational franchise was in keeping with the progress of the times.

There is everything in favour of a specialized learning such as medicine and surgery being imparted to members of families with long medical traditions rather than to others. This was the practice in ancient India, a practice which derived its sanction from considerations of heredity and home environment. It was believed that one belonging to a medical family would have a better aptitude for medical learning and practice than one who is from non-medical family.

In support of this statement Dr. R. K. Mookerjee says in his ancient Indian education that:—‘Social psychology has proved that every individual has his own equipment of emotions, action-attitudes and ways of thinking, which is the gift of the traditions and social environment in which he is brought up’.

Each scheme of training must therefore take into account the concrete individual, a product of biological gifts and social heritage. A neglect of this basic situation renders the process of education less fruitful and sometimes even risky to the personality.

The investigation of Haggerty, Nash and Goodenough show further that the educational status and vocation of the parents have a significant correlation with the level of capacity of the children as indicated by the intelligence quotient. For instance, the children of professional parents of those of a higher academic standing possess, on the whole, a higher value of I. Q. The implication of such facts cannot be ignored in schemes of national education.

It is neither necessary nor indeed possible here to comment on all desiderata item by item. Two of the requirements, both connected with the moral equipment of the student, may however be noticed in passing. These are Brahmacharya (ब्रह्मचर्य) and Jitendriyatva (जितेन्द्रियत्व) and both are qualities whose importance in the life of a student cannot be over-emphasised. The life of one who is following the pursuit of learning is a dedicated one and the votary of knowledge should therefore be able to turn his back on all sense-pleasures in the manner of the boy Naciketas, who when tempted by king Yama to give up his determination to seek the truth said: 'तवैव वाहास्त्व वृत्तगीते' 'Keep thou thy chariots, thy dancing girls and singing; I will have none of them.' It is then and then only that the great king of the the Dead considered him worthy of being taught, saying:-

विद्यामीप्सितं नचिदेतसं मन्ये न त्वा कासा बहवो लोलुपन्तः ।

"I know that you Naciketas, are a true seeker after knowledge, for you resisted all the temptations I put before you."

CHAPTER VI

THE OATH OF INITIATION

IN CARAKA SAMHITA

अथैनमभिसकाशे ब्राह्मणसकाशे भिक्षूपकाशे चानुशिष्यात्, ब्रह्मचारिणा इमश्रुवारिणा सत्यवादिनाऽमांसादेन मेध्यसेविना निर्मत्सरेणाशन्नधारिणा च भवितव्यम्, न च ते मद्वचनात्किंचिदकार्थं स्यादन्यत्र राजद्विष्टात् प्राणहराद्विपुलादथर्स्यादनर्थसंप्रयुक्ताद्वाऽप्यर्थात् ;

मदर्पणेन मत्प्रधानेन मदधीनेन मत्प्रियहितानुवर्तिना च शस्त्रद्वितव्यम्, पुत्रवहासबदर्थिवचोपचरताऽनुवस्तव्योऽहम्, अनुत्सेकेनावहितेनानन्यमनसा विनीतेनावेदयावेक्ष्यकारिणाऽनसूयकेन चाभ्यनुज्ञातेन प्रविचरितव्यम्, अनुज्ञातेन (चानुज्ञातेन च) प्रविचरता पूर्वं गुरव्योपाह्वरणे यथाशक्ति प्रयतितव्यम् ;

कर्मसिद्धिमर्थसिद्धिं यशोलाभं प्रेत्य च स्वर्गमिच्छता भिषजा स्वया गोब्राह्मणमादौ कृत्वा सर्वप्राणभृतां शर्माशासितव्यमहरहरतिष्ठता चोपविशता च ;

सर्वास्मना चानुराणामारोग्याय प्रयतितव्यम्, जीविन्हेतोरपि चानुरेभ्यो नाभिद्रोशव्यम्, मनसाऽपि च परस्त्रियो नाभिगमनीयास्तथा सर्वमेव परस्वं, निभृतवेशपरिच्छदेन भवितव्यम्, अशौण्डेनापापेनापापसहायेन च, श्लक्ष्णशुक्लवर्ण्यधन्यवत्यहितमितवचसा देशकालविचारिणा स्मृतिमता ज्ञानोत्थानोपकरणसंपत्सु निस्थं यतनवता च ;

न च कदाचिद्राजद्विष्टानां राजद्वेषिणां वा महाजनद्विष्टानां महाजनद्वेषिणां वाऽप्यौषधमनुविधातव्यम्, तथा सर्वेषामत्यर्थविकृतदुष्टदुःखशीलाचारोपचाराणामनपवादप्रतिकाराणां सुमूर्षणां च, तथैवासज्जितेध्वराणां क्षीणमनध्यक्षाणां वा ;

न च कदाचित् स्त्रीदत्तमामिषमादातव्यमननुज्ञानं भर्त्राऽथवाऽध्यक्षेण, आतुरकुलं चानुप्रविशता निवेदितानुमतप्रवेशिना सार्धं पुरुषेण सुपवीतेनावक्शिरसा स्मृतिमता स्तिमितेनावेक्ष्यावेक्ष्य मनसा सर्वमाचरता सम्यक्कृतान्प्रवृत्तयः, अनुप्रविश्य च वाङ्मनोबुद्धीन्द्रियणि न क्वचित्प्रणिश्रातव्यान्यन्यत्रातुरादातुरोपकारार्थादातुराणां पक्षेण वा भावेषु, न चातुरकुलवृत्तयो बहिर्निश्चारयितव्याः, हस्तिनं चायुषः प्रमाणमातुरस्य जानताऽपि त्वथा न वर्णयितव्यं तत्र यत्रोच्यमानमतुरस्यान्यस्य वाऽप्युपघाताय संपश्यते;

ज्ञानवताऽपि च नात्यर्थमात्मनो ज्ञाने विकस्यितव्यम्, आप्तादपि हि विकस्यमानादत्यर्थमुद्धि-
जन्त्यनेके ॥ चरक. वि. अ. ८, १३.

"The teacher then should instruct the disciple in the presence of the sacred fire, Brāhmaṇas and physicians:-

(saying) 'Thou shalt lead the life of a bachelor (Brahmacārī), grow thy hair and beard, speak only the truth, eat not meat, eat only pure articles of food, be free from envy and carry no arms. There shall be nothing that thou oughtest not do at my behest except hating the king or causing another's death or committing an act of great unrighteousness or acts leading to calamity.

Thou shalt dedicate thyself to me and regard me as thy chief. Thou shalt be subject to me and conduct thyself for ever for my welfare and pleasure. Thou shalt serve and dwell with me like a son or a slave or a supplicant. Thou shalt behave and act without arrogance and with care and attention, and with undistracted mind, humility, constant reflection, and with ungrudging obedience. Acting either at my behest or otherwise, thou shalt conduct thyself for achievement of thy teacher's purposes alone, to the best of thy abilities.

If thou desirest success, wealth and fame as a physician and heaven after death, thou shalt pray for the welfare of all creatures beginning with the cows and Brāhmaṇas.

Day and night, however thou mayest be engaged, thou shalt endeavour for the relief of patients with all thy heart and soul. Thou shalt not desert or injure thy patient even for the sake of thy life or thy living. Thou shalt not commit adultery even in thought. Even so, thou shalt not covet other's possessions. Thou shalt be modest in thy attire and appearance. Thou shouldst not be a drunkard or a sinful man nor shouldst thou associate with the abettors of crimes. Thou shouldst speak words that are gentle, pure and righteous, pleasing, worthy,

true, wholesome and moderate. Thy behaviour must be in consideration of time and place and heedful of past experience. Thou shalt act always with a view to the acquisition of knowledge and the fullness of equipment.

No persons who are hated of the king or who are haters of the king or who are hated of the public or who are haters of the public shall receive treatment. Similarly those that are of very unnatural, wicked and miserable character and conduct, those who have not vindicated their honor and those that are on the point of death, and similarly women who are unattended by their husbands or guardians shall not receive treatment.

No offering of gifts by a woman without the behest of her husband or guardian shall be accepted by thee. While entering the patient's house thou shalt be accompanied by a man who is known to the patient and who has his permission to enter and thou shalt be well clad and bent of head, self-possessed and conduct thyself after repeated consideration. Thou shalt thus properly make thy entry. Having entered, thy speech, mind, intellect and senses shall be entirely devoted to no other thought than that of being helpful to the patient and of things concerning him only.

The peculiar customs of the patient's household shall not be made public. Even knowing that the patient's span of life has come to its close, it shall not be mentioned by thee there, where if so done, it would cause shock to the patient or to others.

Though possessed of knowledge, one should not boast very much of one's knowledge. Most people are offended by the boastfulness of even those who are otherwise good and authoritative."

IN SUSRUTA SAMHITA

कामक्रोधलोभमोहमानाहङ्कारेर्व्यापादव्यपैशुन्यान्नुतालस्यायशस्यानि हित्वा नीचनखरोम्णा शुचिना कषायवाससा सत्यव्रतब्रह्मचर्याभिवादनतत्परैर्णावर्यं भक्षितव्यम्, सदनुमतस्थानगमनशयनासनभोजनाध्ययनपरेण भूत्वा सद्विप्र्यहितेषु वर्तितव्यम्; अतोऽन्यथा ते वर्तमानस्याधर्मो भवति, अफला च विद्या, न च प्राकार्यं प्राप्नोति

अहं वा त्वयि सम्यग्वर्तमाने यद्यन्यथादर्शी रयामेनोभारभवेयमफलविश्व ।

द्विजगुरुदरिद्रमित्रप्रव्रजितोपनतसाध्वनाथ न्युपगतानां चात्मवांश्चानामिव स्वभेषजैः प्रतिकर्तव्यम् ,
एवं साधु भवति, व्याधशाक्तिकपतितपापकारिणां च प्रतिकर्तव्यम्, एवं विद्या प्रकाशते, मित्रयशोधर्मार्थ-
कामांश्च प्राप्नोति ॥ सु. सू. अ. २, ६-७-८.

“Thou shalt renounce all evil desires, anger, greed, passion, pride, egotism, envy, harshness, meanness, untruth, indolence and other qualities that bring infamy upon oneself. Thou shalt clip thy nails and hair close, observe cleanliness, wear brown garment and dedicate thyself to the observance of truth, celibacy and the salutation to elders. Devoting thyself, at my bidding to movement, laying thyself down, being seated, taking thy meal and study, thou shalt be engaged in doing whatever is good and pleasing to me. If thou shouldst behave otherwise, sin will befall thee. Thy learning will go fruitless and will attain no popularity.

If I do not treat thee properly despite thy proper observance of these behests, may sin befall me and my learning will go fruitless.

The twice-born, the preceptor, the poor, the friendly, the travellers, the lowly, the good and the destitute—these thou shalt treat when they come to thee, like thy own kith and kin and relieve their ailments with thy medications. Thus behaving, good will befall thee. Thou shalt not treat a hunter, a bird-catcher, an outcaste and a person doing sinful acts. Thus, thy learning, will attain popularity and will gain for thee friends, fame, righteousness, wealth and fulfilment.”

IN KASYAPA SAMHITA

भो सौम्येनानुकूलेन श्रामिकेण जितेन्द्रियेणाहृताध्यायिना च भवितव्यम्, सर्वत्रवेदिना समान-
दुःखेन देशकालज्ञेन धृतेमता च भवितव्यम्, लोभक्रोधमोहेभ्यां प्रह्रासत्रैरमथर्मांस्त्रोभ्या निवर्तयितव्यम्,
गुरुशुभ्रपावशेषेणाध्येतव्यम्, न चाननुज्ञातेन नचानभ्यर्च्य वा गुरुमममाप्तविद्येन वा प्रचरितव्यम् ॥ ६ ॥

का. सं. वि. पृ. ४०.

“O gentle one, you should be agreeable in disposition and righteous. You should control your senses and be ready to study when called. You shall have no secrets from me, share the suffering of others,

bear in mind country and clime and be resolute. You should be away from greed, anger, infatuation, envy, derision, enmity, wine, flesh and females. You should apply yourself to study after serving the preceptor. You should not go away without taking his permission, without having worshipped the preceptor and without completing the full course of study."

In Hastayurveda

न शठेनानुशंसेन न लुब्धेनानसूयिना ।
 न निष्ठुरेण नृजुना तथैवानलसेन च ॥ १२ ॥
 अपापेनार्यशीलेन कुटुम्बस्यानुकम्पिना ।
 भवितव्यं त्वया वत्स नित्यमाचार्यसेविना ॥ १३ ॥
 तदेवमनुवृत्तस्य वज्राभ्ययनभोजनैः ।
 यदि शाठ्यं गुरुः कुर्यात् स क्षिप्यमलभागमवेत् ॥ १४ ॥
 गुरोर्वा प्रवृत्तस्य विद्याज्ञाह्लादनादिभिः ।
 यदि क्षिप्योऽन्यथा कुर्यात्स गुरोः पापमृच्छति ॥ १५ ॥

हस्त्यायुर्वेद ६, १२-१५.

"O son! you should never turn deceitful, wicked, greedy, envious, hard-hearted and unfair. You should always be free from lethargy and sin and should have the character of venerable persons and compassion for the family and should always put yourself at the service of the preceptor.

If towards such a submissive student the preceptor is unfair in the matter of clothes, study and food, he will incur the sin committed towards the disciple.

In spite of the noble dealing of the preceptor in the matter of imparting learning, food and delight, the disciple behaves in a contrary manner, he incurs sin committed towards his preceptor."

The spirit of dedication with which all education was pursued and particularly medical education, is evidenced by the character of the initiation ceremony described in the medical texts such as Caraka, Suśruta, Kāśyapa and Pālakāpya. There after going into elaborate details as to how the student should approach the Guru and the

auspicious nature of the time and the place, the teacher depicts fully the nature of the duties and responsibilities devolving upon the aspirant to the medical profession, setting out in full the daily behaviour during the student-career as well as his conduct as a full-fledged physician. This is done in the form of an oath, which is administered to the student by the teacher in the presence of the sacred fire, Brāhmaṇas and physicians of repute and standing. This ceremony reflects the deep import that the ancients had attached to such undertakings, for by that they sought to impress on the young man entering on his career of enlightenment, the solemnity and sanctity of the pursuit he had taken up.

The student took the oath after invoking the names of the great promulgators of Āyurveda, namely Brahmā, Dhanvantari, Prajāpati, Aświns, Indra, and the Ṛṣi compilers of the great medical text-books. This is the list of names as found in Caraka. Suśruta instead of mentioning the individual names of deities and the Ṛṣis refers in general to all presiding deities and Ṛṣis of medicine. In Kāśyapa we find mention of Soma, Kāśyapa, Sarasvatī and Pūrṇa Bhaga as being the gods to be invoked at the administration of the oath. Pālakāpya, the author of Hastyāyurveda or the science of medicine for elephants, lays down the invocation of the deities and elephants of the quarters, Śaṅkara, Viṣṇu, the sun and the moon, the planets, Skanda and a host of minor deities.

On the completion of the initiation ceremony, the student is said to be a Dwija (द्विज—twice born) and is designated as a Brahmacārī (ब्रह्मचारी) till he completes his life as a student.

प्रथमा जातिः मातृगर्भतो जन्म द्वितीया जातिरुपनयनात् (योगीन्द्रनाथ सेन)

“The first birth is from the womb of the mother and the second birth is through initiation.”

The Brahmacārī is one who has dedicated himself to the pursuit of knowledge. (ब्रह्म ज्ञानं तपो वा आचरति अर्जयत्यवश्यम् ‘One who necessarily practises penance or acquires knowledge.’) He is held in high esteem by all the law-givers and the society.

During the student life, special emphasis is laid on celibacy, abstinence from meat-foods, the non-carrying of weapons and non-resort to seditious and sinful acts even at the express command of the teacher, to whom the student otherwise owes unquestioning obedience. Brahmācārī, as he is now called, is according to Kāśyapa exhorted to keep a liberal mind and progress with the spirit of the times. The part of the oath which relates to the life that the student was to lead when he actually took up the calling of a physician will be touched upon when we come to the subject of the ceremony marking the completion of the studies or graduation.

CHAPTER VII

THE QUALITIES REQUIRED IN THE STUDENT FOR ADMISSION TO MEDICAL STUDIES

Taking into full view the various qualities depicted as being the requirements for a student for admission into the medical institution, we find that the physical, moral and intellectual aspects of the student were comprehended by the list of virtues mentioned therein. It is evident from this that the greatest stress was laid on the moral make-up of the medical aspirant. But the intellectual and physical qualities though only next to it, were not only not neglected but demanded a high standard. They insisted that the physical appearance must not offend the aesthetic sense of general humanity and specially in view of the impression that the medical man has to make on the patient. Hence the general traits, features and complexion were required to be pleasant and the speech to be clear and distinct. As regards the moral qualities insisted upon, they were very high.

As regards the intellectual qualities, they have maintained a very high and strict standard in the entrance examination; two out of every five candidates were successful to get admission.

We shall here mention some of the salient qualities described as constituting the eligibility of a student for medical studies according to the text of Caraka, Suśruta, Vāgbhaṭa and Kāśyapa.

- प्रशान्तः... ..Possessed of tranquil disposition.
 आर्यप्रकृतिः, , gentlemanliness.
 अशुद्रकर्मा, , nobility.
 कज्जुचक्षुसुखवासः ...Straight of eye, mouth and nose.
 तनुक्तागिण्डः....With thin, ruddy and clear tongue.
 अशुक्लदन्तः...With seemly teeth and lips.
 अशुक्लदन्तःWith no defect of speech.
 धृतिमान्Endowed with retention.
 अनहङ्कृतःFree from egotism.
 मेधावीIntelligent.
 वितर्कमृत्तिसम्पन्नः...Endowed with reason and memory.
 सदाशिवःEndowed with large-mindedness.
 तद्विद्यकुलजः.... ..Possessing a lineage devoted to the science.
 तद्विद्यवृत्तःShowing inclination for medical science.
 तत्त्वानुसन्धिविप्री ... Possessing a predilection for philosophy.
 अव्ययःBeing whole of body.
 अव्ययप्रेक्षितः ... Unimpaired in senses.
 निश्चितःBeing collected of mind.
 अनुकूलवेष्टःNot given to showy appearance.
 अव्ययनीNot given to addictions.
 अर्थतत्त्वसाक्षरः ...Possessed of deep insight into things.
 अकोपनःNot irritable.
 शीलशौचाचारानुगम- } Possessed of character, purity, conduct,
 दाक्ष्यप्रादक्षिण्योपपन्नः } affection, skill and compliance.
 अध्ययनाभिरुचिः....Having passion for study.
 अर्थविज्ञाने कर्मदर्शने } Being undistracted of mind in understanding
 चानन्यकार्यैः } the sense and observing the practical demon-
 stration of the science.
 अलुब्धःFree from greed.
 अनलसःFree from procrastination.
 सर्वभूतहितैषी ... Wishing the welfare of all creatures.
 आचार्यसर्वानुशिष्टिप्रतिप्रतिकरः...Implicitly obedient to the teacher.
 अनुरक्तः.... ..Affectionate.
 अन्वय-वय-शौर्य-विनय-शक्ति- } Possessed of proper lineage, age,
 बल-प्रतिपत्ति-युक्तः..... } spirit, humility, strength, vitality and
 knowledge.
 तन्मोष्ठदन्तः.... ..Delicate of lips and teeth.

प्रसन्नचित्तवाक्चेष्टः...	Tranquil of mind, speech and behaviour.
क्लेशसहः....	...Possessed of endurance.
गुरुभक्तः....	...Devoted to the teacher.
अभियुक्तः....	...Attached to the teacher.
पाटवैः अतियुक्तः...	...Possessed of cleverness in various subjects.
तनुनखः...	...Possessing thin nails.
स्निग्धच्छविः ...	...Unctuous in complexion.
तनुच्छविः ...	...Having delicate lustre.
ब्रह्मचारी ...	...Devoted to celibacy.
जितद्वन्द्वः ...	...Possessed of indifference to pain and pleasure.
धीरः....	...Wise.
सुचरितः ...	...Good in conduct.
स्थिरः ....	...Having stability of mind.
शुक्लः ....	...Possessed of purity of mind.
लज्जयाश्रितः	Endowed with shyness.
शौचकुलान्वितः ...	Possessed of clean habits and good lineage.
क्षान्तः...	...Possessed of patience.
दक्षिणः ....	..Compliant.
अनुकूलः....	...Submissive.
कुले जन्म ....	...High birth.
यथोक्तकारी...	...Prompt in the execution of the teacher's behests.
अनुत्प्रेक्षः....	...Free from arrogance.
ईर्ष्याविवर्जितः....	Free from envy.
स्मृतिमान्....	...Possessed of memory.
सत्यवान्....	...Truthful.
दृढव्रतः....	...Possessed of determination.
सदाज्ञापरिपालकः....	Carrying out the behests of the good.
दम्भमात्सर्यनिर्मुक्तः....	Free from bluster and envy.

CHAPTER VIII

QUALITIES OF THE TEACHER

The texts of Āyurveda also lay down what the qualities of a real teacher should be. They desired that the teacher should be of high exceptional abilities both moral and intellectual, and should enable the pupils to attain a knowledge that would give them

fulfilment of life. With this high purpose in view, the teacher was required to be an ideal to the pupils and an undenyng source of knowledge and inspiration to them. Hence his qualities were placed very high and only within the possibility of the best men of the race. He was also required to know the whole science, and even allied sciences and arts thoroughly and exhaustively. Not only that, but he must be able to supplement the texts by his own comments drawn systematically from his own imagination and logic. He must possess the necessary powers of expression and exposition and clarity so as to enable the three grades of students namely, highly intelligent, the moderately intelligent as well as the lowest grade of students to understand. The teacher was also required to be able either to expand or to abridge the exposition of a subject as the occasion demanded.

More than all these, the teacher must be able to bring to his high task an undistracted mind and make this his sole task of life and devote all his energies to it. He must have unbounded affection for his disciples and should devote a personal and individual care and thought over every pupil and be his source of inspiration and guidance through life. This spirit is gradually on the wane under the present condition of educational methods and it is most essential that we try to revive this spirit of intimate relation between the teacher and the taught.

Lastly, the teacher may not withhold from his pupils any aspect or recondite doctrine regarding the science that he undertook to teach at the time when the student takes the oath of initiation. To make this a moral and spiritual binding, the teacher had to take vow, on the occasion of taking oath of initiation by the student.

अई वा त्वयि सम्यग्वर्तमाने यद्यन्यथादर्शी ह्यासेनोभाग्मवेयमफलविद्यश्च ।

सु सू. २, ७

“When you on your part keep your vows and if I do not respond fully and impart all my knowledge I shall become a sinner and my knowledge shall go fruitless”. Such a vow is worth introducing into the present system of education.

The Smṛtikaustubha (स्मृतिकौस्तुभ) narrates how a teacher was

condemned to be a mango tree in his next existence for his failure to impart Vedic knowledge.

स चूतवृक्षो विप्रोऽभूद्विद्वान्भै वेदपारगः ।

विद्या न दत्ता विप्रेभ्यस्तेनैव तरुनां गतः ॥

There is an obvious subtle humour in the retribution imposed upon the teacher who would not give what he possessed to others; as a mango tree he would have to give all fruits to others and retain none for himself.

We shall here cite the main qualities required of the teacher as described in Caraka, Suśruta, Vagbhata and Kāśyapa.

पर्यवदातयुतः...Possessed of unblemished knowledge of the science.

परिष्ठुर्ल...Adept in practice.

दक्षः....Possessed of skill.

दक्षिणः...Compliant.

शुचिः...Possessed of the purity of mind and body.

जितहस्तः...Possessed of a practised hand.

उपकरणवान्...Possessed of full equipment.

सर्वेन्द्रियोपनक्तः....Of all the senses intact

प्रकृतिज्ञः....Possessed of full knowledge of constitution.

प्रतिवत्तिज्ञः...Prompt in decision.

उपस्कृतविद्यः....Ripe in wisdom.

अनहङ्कृतः ..Free from arrogance.

अनसूयकः...Free from carping.

अक्रोपनः....Free from irritability.

क्लेशक्षमः....Possessed of endurance.

शिष्यवत्सलः....Possessed of love for the pupils.

अव्यापकः....Devoted to imparting knowledge.

ज्ञानसमर्थः...Capable of deep insight.

धर्मज्ञानविज्ञानोहापोहप्रतिपत्तिकुशलः....Skilled in righteousness, knowledge, science, imagination and practice.

गुणसंपन्नः....Possessed of good qualities.

सौम्यदर्शनः....Endowed with pleasant appearance.

शिष्य-हित-दर्शी...Given to seeing to the welfare of the pupils.

उपदेष्टा...Given to guidance.

मिषकृशास्त्रव्याख्यानकुशलः...Skilled in the exposition and interpretation of the science of medicine.

condemned to be a mango tree in his next existence for his failure to impart Vedic knowledge.

स चूतवृक्षो विप्रोऽभूद्विद्वान्भै वेदपारगः ।

विद्या न दत्ता विप्रेभ्यस्तेनैव तरुनां गतः ॥

There is an obvious subtle humour in the retribution imposed upon the teacher who would not give what he possessed to others; as a mango tree he would have to give all fruits to others and retain none for himself.

We shall here cite the main qualities required of the teacher as described in Caraka, Suśruta, Vagbhata and Kāśyapa.

पर्यवदातयुतः...Possessed of unblemished knowledge of the science.

परिच्छिन्नार्त्ता...Adept in practice.

दक्षः....Possessed of skill.

दक्षिणः...Compliant.

शुचिः...Possessed of the purity of mind and body.

जितहस्तः...Possessed of a practised hand.

उपकरणवान्...Possessed of full equipment.

सर्वेन्द्रियोपनक्तः....Of all the senses intact

प्रकृतिज्ञः....Possessed of full knowledge of constitution.

प्रतिवत्तिज्ञः...Prompt in decision.

उपस्कृतविद्यः....Ripe in wisdom.

अनहङ्कृतः ..Free from arrogance.

अनसूयकः...Free from carping.

अक्रोपनः....Free from irritability.

क्लेशक्षमः....Possessed of endurance.

शिष्यवत्सलः....Possessed of love for the pupils.

अव्यापकः....Devoted to imparting knowledge.

ज्ञानसमर्थः...Capable of deep insight.

धर्मज्ञानविज्ञानोहापोहप्रतिपत्तिकुशलः....Skilled in righteousness, knowledge, science, imagination and practice.

गुणसंपन्नः....Possessed of good qualities.

सौम्यदर्शनः....Endowed with pleasant appearance.

शिष्य-हित-दर्शी...Given to seeing to the welfare of the pupils.

उपदेष्टा...Given to guidance.

मिषकृशास्त्रव्याख्यानकुशलः...Skilled in the exposition and interpretation of the science of medicine.

"He must be given to cleanliness, devoted to the preceptor, skilful and free from torpor or excessive sleep".

शयीत सुप्त एवास्तिष्ठतिष्ठेतास्य पूर्वतः।

अ. ह. सू. २, ६

"He must go to bed after his master has lain down to sleep and must rise from bed before his master".

2. His Dress, Diet And General Behaviour

ब्रह्मचारिणा इमंश्रुधारिणा सत्यवादिनाऽमांसादेन मेध्यसेविना निर्मत्सरेणाशन्नधारिणा च भवितव्यम् ।

च. वि. ८, १३.

"Thou shalt lead the life of a bachelor, grow thy hair and beard, speak only the truth, eat no meat, eat only pure articles of food, be free from envy and carry no arms".

नीचनखरोम्णा शुचिना कषायवाससा सत्यवतब्रह्मचर्याभिवादनतत्परेणावश्यं भवितव्यम् ।

सु. सू. २, ६.

"He must keep his nails and hair clipped close, observe cleanliness, wear brown garments, devote himself to the vow of truth and celibacy and be ever prompt in making obeisance to his elders".

अप वत्स ! तदेतद्धर्मं यथा तथोपधारय मया प्रोच्यमानं—अथ शुचये कृतोत्तरासज्जाया-
व्याकुलायोपस्थितायाध्ययनकाले शिष्याय यथाशक्ति गुरुरपदिशेत् ।

सु. सू. ३, ६४.

"Beloved one ! As regards the method of study, listen as I describe it. The preceptor should impart instruction to the best of his ability, to the disciple who has approached him in a state of cleanliness wearing his upper garment and with an attentive mind at the appointed hour of instruction".

हीनान्यवेष आचार्यं पुरुषासीत् राजवत् ।

अ. सं. सू. २.

"Being attired modestly and also differently from the preceptor, the disciple should serve the preceptor as he would a king."

प्रहासैरमद्यमांस्त्रीभ्यो निवर्तयितव्यम् ।

का. सं. वि. ६-

"He should renounce ridicule, enmity, intoxicating drinks, meats and women."

न व्रूयात् केवलं नाम न साध्वपि दिनोदयेत् ।

अ. सं. सू. २, ७.

(गुरुकृतां दुर्गीहां उपहासपूर्वकं न अनुकुर्वीत्)

"He should not call only by name or should amuse with things though good."

("He should not imitate even in ridicule a bad act done by the preceptor.")

3. His Moral And Religious Life

सत्यवादिना निर्ममसरेण भवितव्यम् ।

अनुसंकेन अवहितेन अतन्यमनसा विनीतेन अवैक्ष्यावेक्ष्यकारिणा अनसूयकेन च अभ्यनुज्ञातेन प्रविवर्तितव्यम् ।

च. वि. ८, १३.

"Thou shalt be truthful and free from envy. Thou shalt behave and act without arrogance and with care and attention and with undistracted mind, humility, constant reflection, and with ungrudging obedience."

काम-क्रोध-लोभ-मोह-मान-अहंकार-ईर्ष्या-पाशुष्य-पैशुन्य-अनुत-आलस्य-अयशस्यानि हित्वा ।

सु. सू. ७, ६.

"The disciple should serve his master renouncing evil desire, greed, passion, pride, conceit, envy, harshness, slander, falsehood, indolence and other qualities which bring infamy upon oneself."

धार्मिकेण जितेन्द्रियेण भवितव्यम् ।

लोभ-क्रोध-मोह-ईर्ष्या-प्रहास-वर्जितः ।

का. सं. वि.

"The disciple should be righteous, self-controlled and free from greed, anger, passion, envy and ridicule etc."

4. Method Of Study

पदं पादं श्लोकं वा; ते च पदपादश्लोका भूयः क्रमेणानुसंधेयाः, एवमेकैकशो घट्टयेत्तद्वचनानुपठेत् । अद्भुतमविलम्बितमविशङ्कितमननुतापिकं सुव्यक्ताक्षरमपीडितवर्णमक्षिभ्रुवौष्ठहस्तैरनभिनीतं सुसंस्कृतं नात्युच्चैर्नातिनीचैश्च स्वरैः पठेत् ।

सु. सू. ३, ५४

"One should learn to recite word by word or verse by verse. Again they should be linked together properly as words, phrases and verses. Having thus formulated them, they should be repeatedly recited. One should recite neither too fast nor in a hesitant manner nor in a nasal twang but should recite bringing out each syllable distinctly without over-stressing the accents and without making any distortions of the eye-brows, lips and hands. One must recite systematically and in a voice not too high-pitched nor too low."

समे शुबौ देशे सुखोपदिष्टो मनःपुरःभवाभिर्वाग्भिः सूत्रमनुपरिक्लामन् पुनः पुनरावर्तयेद् बुद्ध्या
मन्यगनुप्रतिद्वयार्थतत्त्वं स्वदापपदिहार्थं परदोषपमाणार्थं च; एवं सध्यंदिनेऽपराह्णे रात्रौ च शश्वदपरिहापयन्-
ध्ययनमभ्यस्येत्; इत्यध्ययनं त्रिभिः ।

च. वि. ८. ७

"The student should prosecute his studies seating himself at ease on even and clean ground and concentrating his mind, should go over the aphorisms in order, repeating them over and over again, all the while understanding their import fully, in order to correct his own faults of reading and to recognise the measure of those in the reading of others. In this manner, at noon, in the afternoon and in the night, ever vigilant the student should apply himself to study. This is the method of study."

5. Relation Between The Guru And The Disciple

न च ते मद्रचनात् किञ्चिदकार्यं स्यात् । सदर्थेण सत्प्रबानेन मदधीनेन मतिप्रयुहितानुशर्तिना च
शश्वद् भवितव्यम् ।

च. वि. ८.

"There shall be nothing that thou outthtest not do at my behest.

Thou shalt dedicate thyself to me and regard me as thy chief. Thou shalt be subject to me and conduct thyself for ever for my welfare and pleasure."

मःनुमतस्थान- गमन- शयन- आसन- भोजनाध्ययनपरेण भूत्वा ।

सु. सू. २, ६

"Thou shalt stay, move about, lay thyself down, be seated, take thy meals and prosecute thy studies wholly at my bidding'.

सर्वनिवेदिना न अननुज्ञातेन न चानभ्यर्च्य वा गुरुं न असमाप्तवित्येन वा प्रविचरितव्यम्

का. सं. वि.

“Thou shalt not go without my permission, nor without honouring thy master, nor without finishing your studies”.

तमुपसृत्यारिराधयिषुर्गुरुपरेदमिव च देववच्च राजवच्च पितृवच्च भर्तृवच्चाप्रमत्तः ।

च. वि. ८, ५

“Approaching such a teacher with a view to winning his favour, one should wait on him vigilantly as on the sacrificial fire, as on a god, as on the king, as on the father and as on one's own patron.”

Moreover the teacher addresses the pupil as वत्स, सौम्य etc., and the pupil in turn calls the Guru ‘Bhagavān’ (भगवान्). Thus adjectives used for the teacher and the pupil in the texts are quite significant of the mutual relation of love and respect.

6. Classes

आसीनं सुनिमग्न्यग्रं कृतज्ञाप्यं कृनक्षणम् ।

पृष्ठवानर्शसां युक्तमग्निवेशः पुनर्वसुम् ॥

च. वि. १४, ३.

“Agniveśa questioned the tranquil sage Punarvasu who was seated at ease after having finished his prayers, concerning the entire subject of piles.”

विज्वरं ज्वरसंवेहं पर्यपृच्छत् पुनर्वसुम् ।

विविक्ते शान्तमासीनमग्निवेशः कृत्वाञ्जलिः ॥

च. वि. ३, ३.

“Agniveśa with folded hands, asked Punarvasu, the conqueror of passions, seated peacefully in solitude, the question concerning fever.”

सांख्यैः संख्यातसंख्येयैः सहासीनं पुनर्वसुम् ।

जगद्धितार्थं पप्रच्छ बह्विवेशः स्वसंशयम् ॥

च. सू. १३, ३.

"Unto Punarvasu seated in the company of the numeric metaphysicians who had counted all the existing categories of truth, Agniveśa put his question having in his view the world's welfare".

जनपदमण्डले पञ्चालक्षेत्रे द्विजातिवराध्युषिते काम्पिल्यराजधान्यां भगवान्पुनर्वसुरात्रेयोऽन्तेवाशिगण-
परिवृतः पश्चिमे गङ्गातीरे वनविचारमनुविचरन्निष्ठमग्निवेशमब्रवीत् । च. वि. ३, ३.

"The worshipful Punarvasu Ātreya while on a peripatetic tour during the latter month of the hot season, attended by his entourage of disciples, through the woodlands skirting the Ganges near the capital city of Kāmpilya in the populous zone of the country of Pāncāla, wherein resided the elite of the twice-born communities, thus observed addressing the disciple Agniveśa."

विहरन्तं जितात्मानं पञ्चगङ्गे पुनर्वसुम् ।

च. वि. ४, ३

"To Punarvasu, who was sojourning in the country of the five rivers and who was self-possessed of mind."

भगवन्तं खल्वात्रेयं कृताहिकं हुताग्निहोत्रमासीनमृषिगणपरिवृतमुत्तरे हिमवतः पार्श्वे विनयादुपे-
त्याग्निवाद्य चाग्निवेश उवाच । च. वि. १९, ३

"Having approached obediently, and after making salutations to the worshipful Ātreya as he was seated in the northern region of the Himālayas surrounded by an assembly of sages after he had concluded his daily austerities and tended the sacred fire, Agniveśa addressed him."

A class consisted of at best of six, eight or twelve pupils with one of them as a monitor, acting as a representative of the class with the master and as the deputy of the master with the pupils. He was generally the best pupil of the class. Such, for instance, were Agniveśa and Suśruta in their classes of about six or more.

अथ मैत्रीवरः पुण्यमायुर्वेदं पुनर्वसुः ।

शिष्येभ्यो दत्तवान् षड्भ्यः सर्वभूतानुकम्पया ॥

अग्निवेशश्च भेलश्च जतूकर्णः पराशरः ।

हारीतः क्षारपाणिश्च जगृहुस्तन्मुनेर्वचः ॥

“Thereafter Punarvasu, the most benevolent, moved by compassion for all creatures bestowed the science of life on his six disciples—Agniveśa, Bhela, Jatūkarna, Parāśara, Hārīta and Kṣārapāṇi received the teaching of that sage.”

अथ खलु भगवन्तममरवरमृषिगणपरिवृतमाश्रमस्थं काशिराजं दिवोदासं धन्वन्तरिमौपधेनव-
वेतरणौरभ्रपौष्कलावतकरवीर्यं(र)गोपुररक्षितसुश्रुतप्रभृतय ऊचुः।

सु. सू. १. ३.

टीका—प्रभृतयशब्देन भोजादयः। अन्ये तु ‘गोपुररक्षितौ’ इति नामद्वयं मन्यन्ते इत्यौपधेनवादयोऽष्टौ
प्रभृतिग्रहणाग्निमि-काङ्कायन- गार्ग्य- गालवाः एवमेतान् द्वादशशिष्यानाहुः।

“Thus the disciples, Aupadhenava, Vaitaraṇa, Aurabhra, Pauṣkalāvata, Karavīrya, Gopurarakṣita, Suśruta and others approached and said to the worshipful Dhanvantari, the king of Kāśī known as Divodāsa, the best among the gods as he was seated in his hermitage surrounded by the sages.”

Commentary—“The word प्रभृतयः means Bhoja and others; but some are of the opinion that Gopura and Rakṣita are two persons and thus Aupadhenava followed by the pupils upto Suśruta makes the number eight; ‘and others’ means Nimi, Kāṅkāyana, Gārgva and Gālava, and hence the number of pupils goes to be twelve.”

तपःस्वाध्यायनिरतानात्रेथः शिष्यसत्तमान् ।

षडग्निवेशप्रमुखातुक्त्वान् परिचोदयन् ॥

च. सू. २२. ३.

“Addressing himself to the six choicest of his disciples headed by Agniveśa, who were dedicated to study and meditation, the master Ātreya declared as follows, with a view to stimulate inquiry.”

त ऊचुर्मूयोऽपि भगवन्तम्—अस्माकमेकमतीनां मतमभिसमीक्ष्य सुश्रुतो भगवन्तं प्रक्षति,
अस्मै चोपदिश्यमानं वयमप्युपचारयिष्यामः।

सु. सू. १. १२

“They said to the worshipful master again, Suśruta being appraised by our common disposition will inquire of your honour on our behalf and whatever is said to him by way of instruction we shall pay due attention to”.

7. Manner and Time of Approach to the Preceptor

भगवन्तं खल्वत्रेयं कृण्विकं हुताग्निहोत्रमासीनमृषिगणपमिश्रितमुत्तरे हिमवतः पार्श्वे ।

च. चि. १९. ३

“Having approached obediently, the worshipful Ātreya as he was seated in the northern region of the Himālayas surrounded by an assembly of sages after he had concluded his daily austerities and tended the sacrificial fire.”

आसीनं मुनिमव्यग्रं कृतजाप्यं कृतक्षणम् ।

च. चि. १४. ३.

“The sage who was seated at ease after having finished his prayers and was intent upon teaching at the appointed time”.

अग्निवेशो गुरुं काले संशयं परिपृष्टवान् ।

च. चि. २७. ४

“Agniveśa, choosing the right moment inquired as follows:”—

पृष्टवान् गुरुमेकाग्रमग्निवेशोऽग्निवर्चसम् ।

च. चि. २९. ३.

“Agniveśa addressed the master who was seated in an attentive mood and glowing like fire”.

प्रणम्योवाच निर्मोहमग्निवेशोऽग्निवर्चसम् ।

च. चि. ४, ३.

“Saluting the sage who was undeluded of mind and who was resplendent like fire, Agniveśa said (to him)”.

विनयादुपेत्याभिवाद्य चाग्निवेश उवाच ।

च. चि. १९, ३.

“Agniveśa, having approached obediently and after making salutations, said.”

अग्निवेशो गुरुं काले विनयादिदमुक्तवान् ।

च. चि. २१, ५.

“Agniveśa choosing the right moment told this to the preceptor very humbly”.

हुः।मिहोत्रमासीनमृषिभ्यो पुनर्वसुम् ।
पृष्ठवान्गुरुमेकाग्रमग्निवेशोऽग्निवर्चसम् ॥

च. वि. २९, ३.

“ Agniveśa addressed the master Punarvasu, who was seated in an attentive mood amidst the sages, glowing like fire after completing his daily sacrificial rites. ”

अगस्त्यः।मिहोत्रमासीनमृषिभ्योऽतः परं सर्वक्रियाणां पुरीषान्श्रयाणां समुत्थान-स्थान-संस्थान-वर्ण-नाम-प्रभाव-चिकित्सित-विशेषान् पप्रच्छोपसंगृह्य पादौ ।

च. वि. ७, ८

“ Agniveśa, touching the feet of the worshipful Ātreya, here, asked concerning the characteristics of all kinds of parasites infecting the human body, their cause, habitat, form, color, name, effects and treatment’.

महर्षिः।द्वैर्वृत्तमग्निवेशः पुनर्वसुं प्राजलिङ्गन्वपृच्छत् ॥ ३ ॥

च. वि. ३, ३.

“Agniveśa with folded hands asked Punarvasu who was surrounded by sages’.

It is evident from the circumstance described in Caraka that the first consideration was paid to cleanliness and purity of body and mind, on the side of both the Master and the pupils. The pupil approaches his master and beseeches instructions on the various aspects of the science only after the Guru has finished his ablutions and religious rites such as feeding the sacrificial fire etc. The Guru is also observed to be sitting amidst brother sages and men of learning. And in certain discussions the pupils as well as the sages present, participate and give out their opinions until in the end, the master surveys the whole range of the subject in its various aspects and gives his final verdict on the subject under discussion. Thus in Caraka on the subject of the Category of Taste (च. २६), we find various theories propounded first by those present and the summing up and the final decision declared by the master at the end. Thus the matter was not one-sided and monotonous lecturing by the teacher, oblivious to the various requirements of the varied mental grades of intelligence of the students composing the class. There was a cooperative effort, an intelligent participation by the pupil in the evolution of the final and correct appraisal of a subject and in the formulation of right decisions on mooted points. It follows that the pupils were

diligently observing physical and mental cleanliness and purity themselves. They performed their baths and prayers with the greatest scruple and kept their minds free from distracting thoughts and emotions. They held their master in great reverence and listened to every word dropping from his mouth with respectful and intelligent attention, and yet never hesitated to state their position in case of doubt and ask for further clarification and light. The student whenever he approached the master prostrated at his feet. One of the main qualities required was that the disciple should be (अभिवादनशीलः) one offering respectful salutation to the master. He must be obedient and modest. He must have self-restraint and must fold his hands before his master. He must not be arrogant or boastful and must deport himself with modesty and self-effacement. He must be given to simplicity both in dress and manner. Certainly the attitude of mind that such conduct required was one of the great and sincere thirst for knowledge and an unfailing faith in the wisdom and virtue of the master at whose feet he learnt his lessons.

This is a spirit that dominated in the ancient method of education.

A religious and ardent attitude without yet forsaking the democratic spirit greatly added to the advantage that the pupil derived from his teacher. In education, the spirit of approach is everything. The reverence that characterised the pupil at that period induced him to pay intelligent and respectful attention to every word of the master.

The monotony of the lecturing will bore many a student in the educational institutions. In ancient India this boredom was avoided by the question and answer method known as परिप्रश्न or discursive method. The scriptures also lay down that an aspirant to knowledge should hear by obedience by questioning or by service. (तद्विद्धि प्रणिपातेन परिश्रमेन सेवया ।)

In a class it was the monitor known as प्रमुख the foremost pupil that put respectfully questions with a view to the edification of the class as well as the world in general. This was also the method obtaining in ancient Greece known as the Socratic method, now seen in the dialogues of Plato.

The physical appearance of the pupils was in keeping with the spirit of their mental and moral outlook. The Brahmachārī was required to grow his beard and hair and wear brown garment. He must be diligent in the observance of cleanliness and clip his nails and hair. Thus a Brahmachārī must have been easily recognisable from his dress and bearing. The idea of a uniform for students must therefore have been in vogue even in those days.

In his daily conduct he was required to observe strict rules. His obedience and submission to the Guru were expressed in his behaviour towards him. He must make respectful salutations to him and seat himself before his Guru occupying a lower position and at some distance. In his diet he has to eschew meat and intoxicating drinks. He must avoid all kinds of luxuries and the company of women. He must not bear arms nor commit criminal offences. He must not be an absolute ignoramus as regards the things of the world either. He was required to know how to adjust to the needs of time and place (देशकालज्ञ). He should avoid excess of sleep and indolence and be alert and active in his habits. Thus the life of a Brahmachārī was no easy one, but a disciplined life of cleanliness and purity illuminated by a dominant love of knowledge and service.

The course of medical education ran through a period of 7 years and during that period he was styled Brahmachārī (ब्रह्मचारी). After completing this education the student who is known as "Adhyayanāntagah" (अध्ययनान्तगः) takes his leave to enter into the next stage of life known as "Gr̥hastha (गृहस्थ)" i. e., the married life. He may pay as a token of gratitude, to his teacher his fee before departing and he undergoes a ceremony akin to modern convocation ceremony. He is then called a "Snātaka" (स्नातक) meaning baptised. He is then a real Dwija (द्विज) or according to some a Trija (त्रिज), a twice-born or thrice-born.

There was a class of Brahmachārī who continued to pursue their studies further all through their lives and took a vow to that effect. They were known as Naiṣṭhika Brahmachārīs, (नैष्ठिक ब्रह्मचारिणः) or life-long scholars who dedicated their whole lives to the pursuit of knowledge.

There were some as in all times, who were of unsteady mind, who went about from teacher to teacher, from one institution to another and never stuck up to any place or person long enough to be of any profit to themselves or others. Such fickle students were known as "Tirtha-Kākas" (तीर्थकाकाः) meaning "wandering crows".

Every institution was a residential one, which assured close contact between the master and the pupils and engendered a spirit of mutual understanding, accommodation and love among the young students. They accompanied the master on his sojourns to neighbouring places either for purposes of practical study and demonstration or for discussions and conferences with other sages and institutions. Again after the course of studentship the young men invariably visited either by way of pilgrimage or prompted by a desire to see the broad world the places of religious and cultural centres. Thus their mental vision was broadened and a universal and humanistic outlook inspired their every thought and action.

The main ideal of the instruction was to develop a full man in the student. For that, hard life was prescribed and it was keenly observed that the student became more and more self reliant. Great attention was paid to the preservation of cleanliness of the mind and body. All this comprised the physical and ethical side and no pain was spared to develop the intellectual side too. With this purpose in view, debates on scientific subjects were often held to develop and test the power of reasoning. Impetus was given to the spirit of inquiry and research and the student was helped to abandon bigotry and to cultivate broadness of vision. Thus moral and spiritual progress paved the way to the building of character and the real ideal of education was realized.

8. Holidays

Lastly, we shall note that certain days were observed as holidays, when the students were to abstain from study. There was a general injunction advising a student not to resort to study while in hunger or thirst or disease or indisposition.

न च क्षुत्पिपासा व्याधिर्वैमनस्यादियुक्ते अभ्यसेत् ।

काश्यपसंहिता

“One should not study when he is overpowered by hunger, thirst, disease, dejection etc.”

न विद्यत्सु अनार्तवीषु नाभ्युदितासु दिक्षु नाग्निसंलवे न भूमिकम्पे न महोत्सवे नोल्कापाते न महाप्रहोषगमने न नष्टचन्द्रायां तिथौ न संध्ययोः ।
च. सू. ८, २४

“Do not conduct your studies, during unseasonal lightning, when the quarters are lit up with a lurid glow or while a conflagration is in progress, during an earthquake, at festive-tide at, the time of meteoric showers, during eclipses of the sun and moon, on the new moon day and during the two twilights.”

कृष्णेऽष्टमी तस्मिन्नेऽहनी द्वे
शुक्ले तथाप्येवमहर्द्विसंध्यम् ।
अकालविद्युस्तनयित्तुषोषे
स्वतन्त्रराङ्गक्षितिपव्यथासु ॥
श्मशानयानाद्यतनाह्वेषु
महोत्सवौत्पातिकदर्शनेषु ।

उ. सू. २, ९-१०

“Do not conduct your studies on the eighth day of the dark-half, the last two days of the fortnight, and the same days of the bright half, two twilights of the day, on days of unseasonal lightning and thunder of clouds, on occasions of calamity to the sovereign or to the sovereignty of the realm, on going to cremation ground or in times of war, on great festival days or on sight of any unnatural phenomena”.

न पर्वसु न संध्यायां न विद्युदुत्कानन्नवर्षाऽसूर्यदर्शनेषु न महोत्सवे न भुक्त्वा न् नाद्भुतदर्शने न गुरुव्यलीकेषु न गोब्राह्मणगुरुपरात्मपीडयां न पक्षिणीषु नाप्यष्टकासु ।

काश्यप. सं. वि. पृ. ४०.

“Do not study on holy days, at two twilights, on days of lightning and tempest, on cloudy and rainy days, on days when the sun is not sighted, on great festival-days, immediately after taking meals, on sight of any thing marvellous, on days when the master is uneasy or when there occurs some distress to the cows, the Brāhmaṇas, the preceptor or such others, on the day of the full-moon and on the eighth day of each fortnight.”

Whenever there was inclement weather such as lightning, thunder-storms, when the sun was hidden by clouds, when there was earthquake, when thunderbolts fell, when there was an eclipse of the sun or the moon or on the new-moon day and at the time of the two twilights—at these times the students should avoid their studies. Besides these prohibited times, the great days of national and religious festivities such as the new year's day and the birthdays of divine incarnations, must necessarily have been observed. We give below a detailed list of the general holidays observed according to the three ancient classics of Caraka, Suśruta and Kāśyapa.

According to Caraka

विद्युत्सु अनर्तवीषु
अभ्युदितसु दिक्षु
अग्निसेप्लवे
भूमिकम्पे
महोत्सवे
उल्कापाते
महाप्रहोपगमने
नष्टचन्द्रायां तिथौ

According to Suśruta

कृष्णे अष्टम्यां
तन्निधने अहो द्वयोः
शुक्ले तथाप्येवम् अकालविद्युत्स्त-
नयितुषोषे
स्वतन्त्रराश्रुक्षितिपथ्यासु
श्मशानयानाद्यतनाह्वेषु
महोत्सवे
और्यातिकदर्शनेषु
येषु विप्रा न अवीयते

According to Kāśyapa

अनध्यायेषु
गुरुव्यलीकेषु
पर्वेषु
विद्युदुल्लानभ्रवर्षासु
असूर्यदर्शनेषु
महोत्सवे
अद्भुतदर्शने
गोब्राह्मणगुरुपरात्म-
पीडयाम्
पक्षिणीषु
अष्टकासु

CHAPTER X

THE METHOD OF THEORETICAL AND PRACTICAL STUDY

The Extent And Scope Of the Study Of Ayurveda

The entire science of Āyurveda which comprehends in its scope both medicine and surgery is divided into eight main branches of study. It is therefore known as the eightfold science of life "Aṣṭāṅga Āyurveda" (अष्टाङ्ग आयुर्वेद). The eight branches are: (1) Medicine i. e. Kāya Cikitsā (कायचिकित्सा), (2) Surgery known as Śalya Cikitsā (शल्यचिकित्सा), (3) Diseases of the part above the supra-clavicular region known as the Śalākya Cikitsā (शालाक्यचिकित्सा), (4) Obstetrics and Pediatrics known as Kaumārabhr̥tya (कौमारभृत्य), (5) Psychotherapy known as Bhūta Vidyā (भूतविद्या), (6) Toxicology known as

Agadatantra (अगदतन्त्र), (7) Vitalization known as Rasāyana (रसायन), and (8) Virilification known as Vājīkaraṇa (वाजीकरण).

Many treatises were written on each of these eight branches of the science and the field of study was so broad that it necessitated that students should specialize in one or more branches of the science after first acquiring a general and comprehensive acquaintance with the entire range of the science. The two great treatises that have come down to us through the ages amply illustrate this tendency to specialization. The Caraka Samhitā, though it refers generally to the whole of Āyurveda is really a treatise on medicine. Its speciality is the theory and philosophy of medicine and general therapeutics and where operative and other forms of surgical measures are indicated it frankly admits these to be outside the scope of its domain, and refers the students to other treatises that must have existed then. Similarly though the Suśruta Samhitā is all comprehensive in its range of discussion, it is a treatise on surgery. Similarly there exist other treatises devoted exclusively to toxicology, psychotherapy, obstetrics and pediatrics etc., though they may all keep in view the general back-ground of the science of life as a whole in outline.

From this it would not be hazardous to infer that the tendency for specialization in one or more branches had existed though a general all-round knowledge as a back-ground for such special studies was never lost sight of.

Apart from the branches of theoretical science there were ten medical arts which a medical student was expected to know. The definition given by Śukrācārya to differentiate art from science is very interesting and significant.

यद्यत्स्याद्वाचिकं सम्यक्कर्मविद्याभिसेद्धम् ।

शक्नोत्युक्तोऽपि यत्कर्तुं कलासंज्ञन्तु तत्समृतम् ॥२५॥

शुक्रनीति अ. ४ प्र. ३

“Whatever is the subject of study as well as of practice is termed a science; while that which even a dumb man can learn to perform is known by the name of art.”

These ten branches as described by the same author are as follows:-

Medical Arts

- | | |
|--|--|
| १. मकरन्दासवादीनां मद्यादीनां कृतिः कला । | 1. The art of preparing flower-juices and other intoxicating liquors. |
| २. शल्यगूढादृतौ ज्ञानं शिरात्रणव्यघ्रे कला ॥ ७१ ॥ | 2. The art of extracting buried arrows, spears etc., and of incision of open wounds and blood vessels. |
| ३. हिङ्गवादिरससंयोगादन्नादिपाचनं कला । | 3. The art of cooking various dishes with the various exudations like asafetida combined in different proportions. |
| ४. वृक्षादिप्रसरारोपपालनादिकृतिः कला ॥ ७२ ॥ | 4. The art of grafting and planting and culture of plants. |
| ५. पाषाणघास्वादिविस्तृप्तिस्मीकरणं कला । | 5. The art of melting and reducing to ashes stones, minerals and the like. |
| ६. यावद्विष्टुविकाराणां कृतिज्ञानं कला स्मृता ॥ ७३ ॥ | 6. Knowledge of the preparation of all things that can be prepared from the juice of sugar-cane. |
| ७. धात्वौषधीनां संयोगक्रियाज्ञानं कला स्मृता । | 7. Knowledge of the combination of minerals and herbs. |
| ८. धातुसंकर्यपार्थक्यकरणं तु कला स्मृता ॥ ७४ ॥ | 8. The art of combining and isolating minerals. |
| ९. संयोगपूर्वविज्ञानं धात्वादीनां कला स्मृता । | 9. The science of producing new compounds of minerals. |
| १०. क्षारनिष्कासनज्ञानं कलासंज्ञं तु तत्स्मृतम् ॥ | 10. The art of extracting the alkalis out of minerals. |
| कलादशकमेतद्वै द्यायुर्वेदागमेषु च ॥ ७५ ॥ | |

शु. अ. ४. प्र. ३

The medical man was expected to know these ten arts viz., (1) Distillation, (2) Operative skill, (3) Cooking, (4) Horticulture,

(5) Metallurgy, (6) Sugar manufacture, (7) Pharmacy, (8) Analysis and separation of metabolic compounds, (9) Compounding of metals, and (10) Preparation of Alkalis, as they were indispensable in the preparation and the application of his curative measures, as well as in his experimental and clinical undertakings. Moreover an analysis and experiment with the animal, vegetable and mineral poisons, for instance, required certain amount of knowledge and skill in these allied arts and crafts. These arts gradually developed and specialized to such an extent that each became a regular independent science viz., botany, zoology, chemistry, pharmacy etc. These sciences have developed as hand-maids of medicine and therefore every medical man will have them to some extent.

The importance of all-round or comprehensive knowledge and the inadequacy and even danger of partial knowledge was expressed by Ātreya in very significant words.

न हि ज्ञानवयवेन कृत्स्ने ज्ञेये विज्ञानमुत्पद्यते ॥

च. वि. अ. ७, ४.

“A full conception of the science will never be attained by the knowledge of only a part of it.”

Vāgbhaṭa also says:

यदि चरकमधीते तद्ध्रुवं सुश्रुतादि-

प्रणिगदितगदानां नाममात्रेऽपि बाह्यः ।

अथ चरकविहीनः प्रक्रियायामखिन्नः

किमिह खलु करोतु व्याधितानां वराकः ॥

अ. ह. उ. ४०, ८४.

“If a man be well read in Caraka but ignorant of even the names of diseases described in Suśruta and other works or if he be not wanting in practical methods but wholly ignorant of Caraka, what can such a poorly equipped man do to relieve the ailments of patients?”

Thus the dangers attending upon a narrow specialization, unilluminated by a general back-ground of comprehensive knowledge were avoided.

The student was advised to pay special attention to have full and clear understanding of the technical terms without which he would not be able to grasp the correct interpretation of the medical science.

अधीयानोऽपि शास्त्राणि तन्त्रयुक्त्यविचक्षणः ।
नाधिगच्छति शास्त्रार्थानर्थान् भाग्यक्षये यथा ॥

च. सि. १२, ४७-४८

"A physician who is not conversant with the canons of exposition though he may be a student of many treatises will fail to grasp the meaning of these treatises, just as a man fails to acquire wealth when fortune has deserted him"

Knowledge of medical sciences and arts only was not sufficient to qualify a medical man but he was expected to be acquainted with a number of other sciences which were likely to bear some relation to life.

न ह्येकस्मिन् शास्त्रे शक्यः सर्वशास्त्राणामवरोधः कर्तुम् ॥

सु. सू. ४, ६

"It is not possible to include all the knowledge of science in a single treatise".

एकं शास्त्रमधीयानो न विद्याच्छास्त्रविश्वम् ।
तस्माद् बहुश्रुतः शास्त्रं विजानीयाच्चिकित्सकः ॥

सु. सू. ४, ७

"One who studies exclusively one science cannot arrive at a correct determination of things; therefore a physician should be versed in the various sciences to have a full grasp of things".

And to acquire this kind of knowledge he was advised to learn it from the expert in that particular branch.

अन्यशास्त्रोपपन्नानां चार्थानामिदोपनीतानामर्थवशात्तेषां तद्विद्येभ्य एव व्याख्यानमनुश्रोतव्यं; कस्मात् ?

सु. सू. ४, ६

"The truths expounded in other sciences but which have been referred to here (in medicine) for our purpose, are to be understood in their full context from the experts in those sciences".

For knowledge, the ancients never hesitated to approach even an unfriendly person.

अमित्रस्यापि.....वचः श्रोतव्यमनुविद्यतव्यम् ॥

च. वि. ८, १४

"Thou shouldst listen and act according to the words of instruction of even an unfriendly person."

Equal importance was given to theoretical and practical training. The person devoid of or deficient in one is ill-entitled to the practice of medicine.

यस्तु केवलशास्त्रज्ञः कर्मस्वपरिनिष्ठितः ।

य सुहृत्स्यातुरं प्राप्य प्राप्यभीरुमिवाह्वय ॥

यस्तु कर्मसु निष्णातो धाष्टर्याच्छास्त्रवद्विष्कृतः ।

स सत्सु पूर्वां नप्नोति वधं चर्हति राजतः ॥

उभावेताव नपुणावसमर्थौ स्वकर्षणि ।

अर्धवेदधर वेतावेकपक्षाविव द्विजौ ॥

सु. सू. ३, ४८-५०.

"He who is learned only in the theory of the science but not skilled in practice gets confounded at the approach of a patient even as a coward feels at entering the battle-field. He who is skilled in practice but is audacious and ignorant of the theory of the science, does not receive approval of good men and receives capital punishment from the king."

Both these are lacking in dexterity and are inept in the discharge of their duties, for they know only half the science and are like birds with one wing only.

And in the medical arts, specially in surgery, dominant importance was attached to the practical work and training. Any amount of theoretical knowledge is of no avail and is a mere burden, if one does not possess practical knowledge.

यथा खरश्चन्दनभारवाही

भारस्य वेता न तु चन्दनस्य ।

एवं हि शास्त्राणि बहुन्यधीत्य

चार्येषु मूढाः खरवद्वहन्ति ॥ सु. सू. ४, ४.

"Even as a donkey that bears a load of sandal-wood is aware only of the weight of the load but not of its fragrance, similarly are the men who have read many treatises of the science but are ignorant of their true significance. They verily carry their load like a donkey."

Thus it is clear that the knowledge of the medical aspirant of those days was comprehensive and in no way mean or easy of attainment and in many respects beyond the actual conditions obtaining even today among the generality of the profession.

Means And Methods Of Study (Theoretical)

We shall next proceed to understand the methods the ancients adopted for disseminating this standard of knowledge and enabling such a comprehensive and thorough proficiency in the science. The three means of imparting and acquiring knowledge were:-

तत्रोपायाननुव्याख्यास्यामः - अध्ययनम्, अध्यापनम्, तद्विषयभाषा चेत्युपायाः ।

च. वि. ८ ६

"To this end, we shall indicate the means viz., study, teaching and discussion with those versed in the same subject. These are the three means."

We shall now discuss in some detail the nature of these three means or methods of education. The first is Adhyayana (अध्ययन) or learning from the teacher, the text and other things pertaining to the science. This word though in its limited sense meant only the learning word by word the sacred texts, yet in a larger sense comprised the whole course of instruction, theoretical as well as practical.

Caraka says:

त्रिविधं खलु रोगविशेषविज्ञानं भवति; तद्यथा आप्तोपदेशः, प्रत्यक्षम्, अनुमानं चेति ।

च. वि. ४, ३.

त्रिविधे त्वदि न ज्ञानसमुद्ध्ये पूर्वमाप्तोपदेशाज्ज्ञानं, ततः प्रत्यक्षानुमानाभ्यां परीक्षोपपद्यते ।

च. वि. ४, ५.

"Three indeed are the modes of ascertaining the nature of disease. They are—authoritative instruction, direct observation and

inference. Out of this group of the three sources of knowledge, the knowledge derived from authoritative instruction comes first. Thereafter investigation proceeds by means of observation and inference.

There are the three channels of acquiring knowledge, the first and most important is the theoretical knowledge and next is the practical experience and application of the theoretical knowledge and of the last but not of the least importance is the inferential method (अनुमान). It comprises of logical elaboration as well as the further supplementations by the intelligent teacher or student based on speculative or imaginative corollaries drawn from the main data of the theoretical text as well as the practical experience acquired in the past.

Theoretical

The first step in theoretical study was the mastering of the texts thoroughly. The texts of the science which were the treatises on medicine and surgery current then, such as Caraka and Suśruta Saṃhitās, were written mostly in a very concise style known as Sūtra style. The books were in combined form of both prose and verse. The prose was in a concise style while the verse was mostly in its simplest form that is Anuṣṭup (अनुष्टुप्). They were meant to be easy for cramming by the pupils and comprehended in their scope of exposition an encyclopedic range of subjects. Their main characteristics were the logical exposition of the theories and methodical classification into various categories.

The exposition of the subject begins with a general outline of the subject in brief followed often by a detailed description of its various aspects. Again at the end there is a recapitulation of the whole matter, mentioning in brief all the subjects covered in the chapter. One of the chapters is devoted entirely to the enumeration of the subjects in the form of index. This system of exposition of a treatise was intended to preserve the text intact and to prevent interpolations.

The chapters represent various methods of exposition, namely simple description, catechism, debates and discussions. The teachers

of Āyurveda like the philosophers that they also were, attempted to arrive at full and precise definitions of the terms and concepts, on which they used to build the frame-work of the science. They attempted to show the original derivations of words in order to enable the student to understand the original as well as the current connotation of the terms used in the treatises; they made a lavish use of similes culled from nature and daily life, in order to illustrate and clarify the meaning of their words to all the three grades of intelligence of the students that comprised the class.

There is a remarkable catholicity of outlook in their teaching and they stimulated further achievements in the field of knowledge by giving constant impetus to the pupils for progress.

This theoretical knowledge was imparted by an oral system of education. This was the practice adopted for the acquisition of Vedic knowledge as well as the knowledge of any other branch of science in ancient India.

The method adopted in actual training as described in Caraka and Suśruta is as follows:-

अथ वत्स । तदेतदध्यैयं यथा तथोपधारय मया प्रोच्यमानं—अथ शुचये कृतेत्तरासङ्गाया-
व्याकुलायोपस्थितायाध्ययनकाले शिष्याय यथाशक्ति गुरुपदिशेत् पदं पदं श्लोकं वा; ते च पदवादश्लोका-
भूयः क्रमेणानुसंधेयाः, एवमेकैकशो घटयेदात्मना चानुपठेत् । अद्भुतमविलम्बितमविशङ्कितमननुनासिकं सुव्यक्ताक्षर-
मपीडितवर्णमक्षिप्नुवौष्ठस्त्रैरनभिनीतं सुसंस्कृतं नात्युच्चैर्नातिनीचैश्च स्वरैः पठेत् । न चान्तरेण कश्चिद् ब्रजेत् तथो-
पवीयानयोः ।

सु. सू. ३, ५४.

“Beloved one ! As regards the method of study, listen as I describe it. The preceptor should impart instruction to the best of his ability, to the disciple who has approached him in a state of cleanliness wearing his upper garment and with an attentive mind at the appointed hour of instruction. One should learn to recite word by word or verse by verse. Again they should be linked together properly as words, phrases and verses. Having thus formulated them, they should be repeatedly recited. One should recite neither too fast nor in a hesitant manner nor in a nasal twang but should recite bringing out each syllable distinctly without over-stressing the accents and without making any distortions of the eye-brows, lips and hands.

One must recite systematically and in a voice not too high-pitched nor too low. No one should intrude when they are studying."

Caraka describes how the teacher imparts the knowledge to students.

समे शुचौ देशे सुखोपविष्टो मनःपुरःसरमिवाग्निः सूत्रमनुश्रिक्रामन् पुनःपुनरावर्तयेद् बुद्ध्या सम्यगनुप्रविश्याथ तत्त्वं स्वदोषपरिहारार्थं परदोषप्रमाणार्थं च; एवं मध्यन्दिनेऽपराह्णे रात्रौ च शश्वदपरिहापयन्नध्ययनमभ्यस्येत् । इत्यध्ययनविधिः

च. वि. ८, ७

"The student, seating himself at ease on even and clean ground, should, concentrating his mind, go over the aphorisms in order repeating them over and over again all the while understanding their import fully, in order to correct his own faults of reading and to recognise the measure of those in the reading of others. In this manner, at noon, in the afternoon and in the night, ever vigilant the student should apply himself to study. This is the method of study".

Oral Training

This is the one aspect which fundamentally differs from the modern system of education. The ancients depended much on their power of memory while the moderns are dependent upon their books. One reason is the achievement and progress of the printing art that has made possible the availability of the required number of books. Luckily the Indians were the people considered specially gifted with the power of memory. This is the reason why there is comprehensive encyclopedic books written in Sūtra or most concise style to minimise the burden on the brain. And the ancients paid special attention for cultivating the power of memory. The power of verbal memory was developed to a degree almost incredible in present time.

It is no wonder that they memorised the whole of Caraka and Suśruta in those days and later on when memory power began to wane, Vāgbhaṭa epitomized the texts of these two books in one volume and in 1/3 size and in verse only in order to facilitate memorising.

This may look like a stupendous task to us unaccustomed to such memory feats, but there are some scholars even in modern days who can remember the references from a great number of books. Both of them are memory giants but the method of application is different. To illustrate to what extent the cultivation of memory power was carried out, Max Muller says:—

‘Thus this view of the subject matter of learning necessarily moulded the methods and system under which it was to be imparted. Hence we find that the preliminary stage of learning was the learning by heart the sacred texts through indefinite repetition and rehearsal by both the teacher and the taught. This means that the cultivation of memory was accorded a most important place in the ancient system of education. The powers of verbal memory were accordingly developed to a degree almost incredible in modern times.’ Again as Max Muller well puts it: ‘We can form no opinion of the power of memory in a state of society so different from ours as the Indian Paṇḍas are from our Universities. Feats of memory such as we hear of now and then, show that our notions of the limits of that faculty are quite arbitrary. Our own memory has been systematically undermined for many generations. To speak of nothing else, one sheet of the Times newspaper every morning is quite sufficient to distract and unsettle the healthiest memory.’ As the same author has further stated in some of his writings, this dependence on verbal memory for the transmission of sacred literature has continued to this day in a sense. ‘Even at the present day when manuscripts are neither scarce nor expensive, the young Brāhmanas, who learn the songs of the Veda, the Brāhmaṇas and the Sūtras, invariably learn them from oral tradition and know them by heart. They spend year after year under the guidance of their teacher, learning a little, day after day, repeating what they have learnt as part of their daily devotion until at last they have mastered their subject and are able to become teachers in turn.’ Max Muller himself arranged to collect various readings for his edition of the R̥gveda not from manuscripts, but from the oral tradition of Vaidik Śrotriyas (श्रोत्रियः) who are fittingly described by the Indian Scholar, Mr. Shanker Pāṇḍurang, who was entrusted with the work, in the following passage: ‘I am collecting a few of our walking

Rgveda MSS., taking your text as basis.' We may also have in this connection some idea of the quantity of literary burden and matter carried in the small heads of these young learners. The Rgveda alone, as we have already stated, consists of 1017 (1028) poems, 10580 verses and about 153826 words. But besides the Rgveda the Sūtra works mention a number of other subjects to be learnt by the student.

An Indian scholar informed Max Muller that even so late as the early "Seventies" the Vedic curriculum comprised of the following:— (1) The Samhitā or hymns; (2) The Brāhmaṇa; (3) The Āraṇyaka; (4) The Gṛhya Sūtras; (5-10) The six Vedāṅgas.

Max Muller calculates that these ten books contain nearly 30,000 lines with each line reckoned as thirty-two syllables. According to his informant, this course was to be finished in eight years. Now 'a pupil studies everyday during the eight years except on the holidays, the so-called Anadhyāyas, non-reading days. There being 360 days in a lunar year, these eight years would give him 2880 days. From this 384 holidays have to be deducted, leaving him 2496 work-days during the eight years.' On this computation, a student of the Rgveda has to learn about twelve ślokas a day, a śloka of thirty-two syllables.

Personal Touch

The instructions, being personal, consisted of a great deal of elaboration of the succinctly worded texts and even supplementation from a line of traditional instruction carried down through a successive line of teacher and pupil. In his teaching, the teacher always took into view the three grades of the intelligence of the pupils. They may be highly intelligent, moderately intelligent and of the lower type of intelligence. Without this supplementary part, the texts perhaps would yield very meagre fruit of knowledge. One has therefore to remember while assessing the value of this difficult and concise texts that they were only the skeleton requiring the filling up of much vital stuff from parallel tradition of supplementary lore; they were mere precis, bare outlines of the subject prescribing only

the germs of principles and theories to be explained and expounded by the learned teacher. That was prevalent in ancient times, and was maintained by the personal and direct conveyance from the teacher to the pupil. This method of direct imparting of knowledge was known generally as Adhyāpāna. It included the imparting of the text of the treatise as well as exposition in elaborate terms of the implications of the texts which method was known as Vyākhyāna (व्याख्यान) or Vivaraṇa (विवरण). This elaboration of the implications in the texts of a treatise was known as Tantra-yukti (तन्त्रयुक्ति). Caraka describes these Tantra-yuktis as being similar in their relation with the texts to the sun in his relation with the forest of lotuses or to a lamp to the house. It awakens the mind and illuminates it so as to make the sense of the treatise exhaustively clear.

यथाम्बुजवनस्यार्धः प्रदीपो वेदमनो यथा ।
 प्रबोधनपक्षाशार्थास्तथा तन्त्रस्य युक्तयः ॥
 एकस्मिन्नपि यस्येह शास्त्रे लब्धास्पदा मतिः ।
 स शास्त्रमन्यदप्याशु युक्तिज्ञत्वात् प्रबुध्यते ॥

च. सि. १२, ४६-४७.

“What the sun is to the lotuses in a pond and what the lamp is to the house, the canons of exposition are to the treatise in subserving the double purpose of awakenment and illumination.

One who has acquired a good grasp of even one branch of this science will be able to acquire an understanding of the other branches as well on account of his being well grounded in general principles.”

That the mastering of a branch of science enables a pupil to acquire, with ease, proficiency in other branches is a statement in Caraka which bears out the fact that not only mastery in any one or more branches of Āyurveda but a good acquaintance though not mastery in all branches was the ideal aimed at. That a sound and thorough mastery and not any haphazard learning was the ideal enforced is clear and that thoroughness was relentlessly aimed at, both by the master and the pupil, is fully borne out. This signifies the importance of the teacher, and Suśruta emphasises the necessity of study under a Guru in very vehement terms.

शास्त्रं गुरुमुखेऽशीर्णमादायोपास्य चापकृत् ।

यः कर्म कुरुते वैद्यः स वैद्योऽन्ये तु तत्कराः ॥

सु. सू. ४, ८.

“He who learns his science directly from the preceptor and repeatedly studies and practises it, is indeed the real physician while all others are mere pilferers.”

Medical Conferences

The idea of holding national and international conferences of scholars and scientists in any branch of knowledge is not confined to modern times alone as some may be disposed to think. This was a custom obtaining in ancient times too and we have ample evidence in the Caraka Samhitā to think that either periodically or whenever there arose doubt and differences of opinion on important questions affecting the theory and practice of science, there took place large or small conferences and discussions to resolve the doubts and establish an authoritative doctrine on the subject. These were different in their character from clinical meetings and debates that we have already surveyed. These were national gatherings where scholars and thinkers from various parts of the country and even scholars from neighbouring countries, assembled in the interests of the advancement of science as a whole and for the promotion of exchange of doctrines and their international dissemination.

The Caraka Samhitā opens with the description of one of the greatest such conferences of sages, when the people as a whole were confronted with the phenomenon of acute disease and premature death and selected and deputed one of them—Bharadwāja, to learn the science of life from Indra. (च. सू. १, ६-१२). There is a conference on a smaller scale of sages depicted, wherein the nature of Vāta and other body-forces is discussed. (च. सू. १२).

There is another conference devoted to the discussion of the theory of Taste and of the elemental composition of its varieties. (च. सू. २६).

There is a conference of sages for discussing the origin of disease and the formation of body-elements. (च. सू. २५).

On the question of eugenics, of marriage, inheritance and constitutional traits and peculiarities, there are discussions among sages and the leader of them, Ātreya, gives out two authoritative conclusions on each subject after the debate. (च. शा. २, ३)

Other such discussions are on subjects like timely and premature death (च. शा. ३) and relative merits of various purgative drugs (च. सि. ११) and other such topics. Thus as a sincere and serious method of advancing the cause of the science and the well-being of mankind, the conferences and debates and discussions were held in Caraka's times even as they are done today. This bespeaks the high degree of enlightenment and the love of progressive knowledge among the learned and their sincere desire for human welfare in those early times of history.

Practical

The common charge made against the ancient Indian genius in general and her medicine in particular is that its nature is more speculative and theoretical than practical and useful. India suffered in the estimation of the world more through world's ignorance of her achievements than through the absence or insignificance of such achievements.

The two fields in which India excelled in the past were philosophy and medicine. Hers was not a philosophy to be studied in the arm-chair and left at that. Her philosophers were realists and practical men. They tested the validity of their conclusion by resorting to the practice of yoga and religious devotion. Yoga and practical religion were closely allied to philosophy and never was philosophy a mere intellectual or imaginative pastime and adventure.

The Hindus have been a practical people and have never allowed their theories to run away without yielding actual results affecting daily life is the opinion of the great western scholars who have studied original books with a scientific spirit.

This is even more true of the realm of medicine. Medical theories have to be justified and tested in everyday life, and medicine and surgery in India could not have survived if they had not stood this test of day to day verification and fulfilment. That they did is due to the fact that the system of medical education laid great emphasis on the study of anatomy and physiology, on dissection of dead bodies and on practical demonstrations, on models as well as on the clinical study of patients in order to enable the students to have a thorough grasp of the secrets of the structure and functions and behaviour of each and every part of the human mechanism in health and disease.

Both the treatises, Caraka and Suśruta repeatedly emphasize the necessity and importance of practical work. Suśruta, the treatise on surgery tries to give even greater importance to practical study.

तस्याङ्गवरमाद्यं प्रत्यक्षागमातुमानोपमानैरविरुद्धमुच्यमानमुपचारय ॥ १६ ॥

सु. सु. १.

“Now listen as I describe its foremost branch which is not in conflict with direct experience, authoritative text, inference and example.”

He gives priority to practicals in the enumeration of methods of study. In ancient works the order of words or phrases is kept meticulously according to their importance.

As Indian Medical science paid as much attention to the study of practical work as it did to theoretical side, we shall review in detail some of the various references pertaining to practical work found in the classics of medicine. To get recognition by the king, the physician should study as well as do the practical work.

एतद्व्यवस्थामध्येयम्, अवीर्य कर्माप्यवश्यमुपासितव्यम्, उभयज्ञो हि भिषग् राजाज्ञो भवति ।

सु. सु. ३, ४७

“The physician should definitely study this science. After studying, he should take practical training. One skilled in both science and art deserves recognition by the king”.

तस्मान्मिषजा युक्तं युक्तिवाद्येन मेषजम् ।
धीमता किञ्चिदाद्यं जीवितारोग्यकाङ्क्षणा ॥

च. सू. १, १२७

“Therefore the intelligent man who desires health and long life, should not take any medicine prescribed by a physician who is a stranger to the art of application.”

While describing the qualities of a Vaidya, Caraka gives equal importance to practical work as to theoretical study.

श्रुते पर्यवदातत्वं बहुशो दृष्टकर्मता ।
दाक्ष्यं शौचमिति ज्ञेयं वैद्ये गुणचतुष्टयम् ॥

च. सू. ९, ६.

“Clear grasp of theoretical knowledge, wide practical experience, skill and purity (of body and mind)—these are to be known as the tetrad of desiderata in a physician.”

तस्माच्छास्त्रेऽर्थविज्ञाने प्रवृत्तौ कर्मदर्शने ।
मिषक् चतुष्टये युक्तः प्राणामिषर उच्यते ॥

च. सू. ९, १८.

“Hence the physician who possesses the fourfold accomplishment consisting of theoretical knowledge, clear interpretation, right application and practical experience, is to be regarded as the reclamer of life”.

ये तु शास्त्रविदो दक्षाः शुचयः कर्मकोविदाः ।
जितहस्ता जितास्मानस्तेभ्यो नित्यं कृतं नमः ॥

च. सू. २९, १३.

“But salutations be constantly proffered to those others who are learned in the science, skilful, pure, expert in performance, practised of hand and self-controlled”.

सर्वरोगविशेषज्ञः सर्वकार्यविशेषवित् ।

च. वि. ६, १९.

“The man who is acquainted with the characteristics of all diseases, and is versed in all therapeutic measures (is a worthy physician).”

पर्यवदातश्रुतं परिदृष्टकर्माणं दक्षं दक्षिणं शुचिं जितहस्तसुपकरणवन्तं सर्वेन्द्रियोपबन्धं प्रकृतज्ञं

प्रतिपत्तिमनुपस्कृतविद्यमनहङ्कृतमनस्यकमकोपनं क्लेशक्षमं शिष्यवत्सलमध्यापकं ज्ञापनसमर्थञ्चेति ।

च. वि. ८, ४.

“He should be one who is thoroughly versed both in theory and practice, who is skilful, upright, pure, deft of hand, well equipped, possessed of all his faculties, who is conversant with human nature and line of treatment, who possesses special insight into the science, who is free from self-conceit, free from envy, free from irascibility, endowed with fortitude, who is affectionate towards his pupils, proficient in reading and skilful in exposition.”

भिषङ्नाम यो भिषज्यति, यः सूत्रार्थप्रयोगकुशलः, यस्य चायुः सर्वथा विदितं यथावत् ।.....
तत्रेमे भिषगुणाः—पर्यवदातधृतता, परिदृष्टकर्मता, जितहस्तता... च. वि. ८, ८६.

“The physician is he who ‘physics’, who is skilled in the application of textual wisdom and who knows all aspects of life correctly... The following are the qualities of a physician—full knowledge of the texts of the science, experience of practical work, deftness of hand.....”

Botany

ओषधीर्नामरूपाभ्यां जानते गजपा वने ।
अविपाश्चैव गोपाश्च ये चान्ये वनवासिनः ॥
न नामज्ञानमात्रेण रूपज्ञानेन वा पुनः ।
ओषधीनां परां प्राप्तिं कश्चिद्विदुर्महति ॥
योगवित्त्वप्यरुणस्तारं तत्त्वविदुच्यते ।
किं पुनर्यो विजानीयादोषधीः सर्वथा भिषक् ॥
योगमासां तु यो विद्याद्देशकालोपपादितम् ।
पुरुषं पुरुषं वीक्ष्य स ज्ञेयो भिषगुत्तमः ॥

च. सू. १, १२०-१२३

“The goat-herds, shepherds and cow-herds and other foresters are acquainted with the names and forms of plants.

No one can claim to have a perfect knowledge of the use of medicinal herbs by the mere acquaintance with the names or even the forms of them.

If one who knows the uses and actions of herbs, though not acquainted with their forms may be called a knower of science, then what need be said of the physician who has a knowledge of herbs in all their aspects.

He is the best of physicians who knows the science of the administration of drugs with due reference to climate and season, and who applies it only after examining each and every patient individually”.

तस्यापीयं परीक्षा—इदमेवंगुणमेवंप्रकृत्यैवंप्रभावमस्मिन्देहे जातमस्मिन्नतावेवं गृहीतमेवं निहितमेव-
मुपस्कृतमनया च मात्रया युज्यमस्मिन् व्याधावेवंविधस्य पुरुषस्यैतावन्तं दोषमपकर्षत्युपशमयति वा, यदन्य-
दपि चैवंविधं मेषजं भवेत्तज्ज्ञानेन विशेषेण युक्तमिति ।

च. वि. ८, ८७

“Of that this is the test—That it is of such and such nature, of such quality, of such efficacy, is born of such a country or region, of such a season, gathered in such a manner, preserved in such a way, medicated thus, and in such dosage, administered in such a disease, to such a person, either eliminates or allays such and such a humor and if there be any medication, in similar manner should it also be examined”.

Preparation of Drugs

करणं पुनः स्वाभाविकानां द्रव्याणामभिसंस्कारः । संस्कारो हि गुणान्तराधानमुच्यते ।

च. वि. १, २२ (२).

“Preparation is the process performed to modify the natural properties of substances. That process again is that which modifies radically the properties of substances”.

अल्पस्यापि महार्थत्वं प्रभूतस्याल्पकर्मताम् ।

कुर्याद संयोगविश्लेषकालसंस्कारयुक्तिभिः ॥

च. क. १२, ४८-४९

“By skilfully carrying out synthetic and analytic procedures on drugs by time-factors and by pharmaceutical processes even a small dose of a drug may be made to produce powerful action and a big dose of medication may be made to produce a very mild result.”

Caraka describes thus the importance of practical knowledge in the preparation of drugs and in prescribing them.

तेषां कर्मसु बाह्येषु योगमाभ्यन्तरेषु च ।

संयोगं च प्रयोगं च यो वेद स भिषग्वरः ॥

च. सू. ४, २९

"He is the best of physicians who knows the art of combination as well as the systematic administration of these preparations both internally and externally".

मानाकालाश्रया युक्तिः सिद्धिर्युक्तौ प्रतिष्ठिता ।

तिष्ठत्युपरि युक्तिज्ञो द्रव्यज्ञानवतां सदा ॥

च. सू. २, १६

"The art of prescription depends on the knowledge of dosage and time, and on this art, in turn, depends success; hence the skilful physician stands ever superior to those possessing merely a theoretical knowledge of drugs".

औषध ह्यनभिज्ञातं नामरूपगुणैस्त्रिभिः ।

विज्ञातं चापि दुर्युक्तप्रनर्थायोपपद्यते ॥

च सू. १, १२७

"The drug whose name, form and properties are not known or the drug which though known, is not properly administered, will cause disaster".

अतश्च प्रकृतं बुद्ध्वा देशकालान्तराणि च ।

तन्त्रकर्तुरभिप्रायानुपायांश्चार्धमादिशेत् ॥

च. सू. २६, ३७

"Many are the ways in which an author expresses his ideas. Hence it is after due appreciation of the context of the particular place and time in question, the intention of the author and the technicalities of the science, that the meaning of the text should be determined."

Anatomy

तस्माभिः संशयं ज्ञानं हर्त्वा शल्यस्य वाञ्छता ।

शोधयित्वा मृतं सम्यग्दृष्टव्योऽङ्गविनिश्चयः ॥

प्रत्यक्षतो हि यद्दृष्टं शास्त्रदृष्टं च यद्भवेत् ।

समासतस्तदुभयं भूयो ज्ञानविवर्धनम् ॥

तस्मात् समस्तगात्रमविशोपहतमदीर्घव्याधिपीडितमवर्षशक्तिकं निःसृष्टान्त्रपुरीषं पुरुष-
भावहन्त्यामापगायां निबद्धं पञ्जरस्थं मुञ्जवल्कलकुशशणादीनामन्यतमेनावेष्टिताङ्गमवकाशो देशो कथयेत्,
सम्यक् प्रकृत्युचितं च कृत्य, ततो देहं सप्तरात्रादुशीरबालवेणुबल्वज्रकुर्वानामन्यतमेन शनैः शनैरवधर्ष-
स्त्वगादीन् सर्वानिष बाह्याभ्यन्तरानङ्गप्रत्यङ्गविशेषान् यथोक्तान् लक्ष्येच्छुषा ॥

न शक्यश्चक्षुषा द्रष्टुं देहे सूक्ष्मतमो विभुः ।
 दृश्यते ज्ञानवश्वभिस्तपश्चक्षुर्भिरिव च ॥
 शरीरे चैव शस्त्रे च दृष्टार्यः स्याद्विशारदः ।
 दृष्टश्रुताभ्यां सन्देहमवापोह्याचरेत् क्रियाः ॥

सु. शा. ५. ४७-५१.

“Therefore a surgeon desiring knowledge free of all doubt must investigate well the dead body and study the human anatomy. In short direct observation and theoretical knowledge together conduce to the enhancement of the surgeon's store of knowledge as a whole.

It is for this reason that the body of a man who has not died of poison or of a long-standing disease and who has not lived to be too old and whose bowels and excrements have been removed should be fitted in a case and wrapped in sacred grass or bark cloth or reeds etc., and placed in a running current of water at a spot not exposed to public view. When it is soaked well for seven days, it should be taken out and scrubbed slowly with a brush made of either cuscus grass, hair, bamboo or balwaja grass and all the body-parts such as skin etc., and the details of the external and internal body-limbs as have been described (in the text) should be observed keenly with the eyes.

It is not possible to see with the physical eyes the subtle principle of the spirit in the body for it is visible to the eye of wisdom or meditation alone.

The wise physician therefore should know the truth both by studying the body as well as the text of the science and resort to practice having cleared all his doubts by the help of both observation and authoritative texts ”

Surgery

अधिगतसर्वसाकार्यमपि शिष्यं योग्यां कारयेत् । रनेहादिषु छेदादिषु च कर्मपथमुपदिशेत् ।
 सुबहुश्रुतोऽप्यकृतयोग्यः कर्मस्वयोग्यो भवति ॥

तत्र पुष्पफलालावूकालिन्दकत्रपुसै(सो)र्वास्वकर्कारकप्रभृतिषु छेद्यविशेषान् दर्शयेत्, उत्कर्त-
 नापकर्तनानि चोपदिशेत् ; दृक्त्वस्तिप्रमेकप्रभृतिषु दृक्पङ्कषूणेषु मेद्ययोग्याम् ; सरोष्णि चर्मण्यातते लेख्यस्य ;
 मृत्पशुमिरासूपलनालेषु च वेद्यस्य ; धुगोपहतकाष्ठेषु तलनालीशु छेदालावूमुखेष्वेव्यस्य ; पनसविन्मी-
 वित्वफलमज्मृतपशुदन्तेष्वाहार्यस्य ; मधूच्छिद्रोपलिते शालमलीफलके विस्त्राव्यस्य ; सूक्ष्मधनं वस्त्रान्तयो-

मृदुचर्मन्तयोश्च सीव्यस्य; पुस्तमयपुस्तवाङ्गप्रत्यङ्गविशेषेषु बन्धनयोग्याम्, मृदुपु मांसखण्डेष्वभिधारयोग्यां,
मृदुचर्ममांसपेशीपूषलनालेषु च कर्णसन्धिवन्धयोग्याम्; उद्वृत्पूर्णघटपार्श्वकोतस्यलघुमुखादिषु च नेत्रप्रणि-
धानवस्तित्रणवस्तिपीडनयोग्यामिति ।

भवतश्चात्र—

एवमादिषु मेधावी योग्यार्हेषु यथाविधि ।
ब्रह्मेषु योग्यां कुर्वाणो न प्रमुह्यति कर्मसु ॥
तस्मात् कौशलमन्विच्छन् शस्त्रक्षाराम्भिकर्मसु ।
यस्य यज्ञेह साधर्म्यं तत्र योग्यां समाचरेत् ॥

सु. सू. ९, ३-६

“After the disciple is fully versed in the texts of the science, he should be given practical training by means of dummies and substitutes for the human limbs. He should be taught the practical line of procedure as regards oleation therapy”.

The art of making excision or amputation (छेद्य) should be demonstrated on a Pūṣpaphala (a kind of gourd), Alābu (Bottle-gourd), Kāṇḍaka (water-melon), Trapusa (cucumber), or Ervāruka (Phut cucumber). The art of cutting either in the upward (उत्कर्तन) or downward direction (अपकर्तन) should be also taught. The art of making incisions (भेद्य) should be demonstrated by making cuts in the water-bag or in the bladder or in the leather-pouch full of slime or water. The art of scraping (लेह्य) should be instructed on a piece of stretched skin with hair on it. The art of perforation or venesection (वेद्य) should be taught on the vein of a dead animal or on a lotus stem. The art of probing or sounding (एष्य) should be taught on worm-eaten wood, or on the reed of a bamboo, or on the mouth of a dried bottle-gourd. The art of extracting (आहार्य) should be taught by withdrawing seeds from the kernel of a Scarlet-fruited gourd, Bael or Jack-fruit, as well as by extracting teeth from the jaws of a dead animal. The act of draining or evacuating (निष्ठाव्य) should be taught on the surface of a Śālmali plank covered over with a coat of bee's wax, and the art of suturing (सीव्य) should be demonstrated on pieces of thin and thick pieces of cloth, skin or hide. Similarly the art of bandaging or ligaturing should be practically learned by tying bandages round the individual limbs and members of a full-sized dummy. The art of plastic surgery of the ear should be practically demonstrated on a soft muscle or flesh or on the stem of a lotus lily. The art of cauterizing or applying

strong alkaline preparations (caustics) should be demonstrated on a piece of soft flesh; and lastly the art of inserting tubes and catheters into the region of the bladder or into an ulcerated channel, should be taught by inserting a tube into a lateral orifice of a pitcher full of water or into the mouth of a bottle gourd.

Here are the two verses—

He who practises experiment on things above-mentioned in a systematic manner does not err in carrying out operative measures.

Therefore the wise physician desiring dexterity in operative and cauterization procedures should practise on suitable objects these operative experiments.”

Practice of other operative measures

तं शस्त्रक्षारान्निर्मिरौषधैश्च
भूयोऽभियुजानमयुक्तियुक्तम् ।
जिजीविषुर्दूरत एव वैद्यम्
विवर्जयेदुग्रविषादितुल्यम् ॥

सु. च. २५, ३२.

“One desirous of saving his life should avoid even from a distance the physician who often makes improper and unskilful use of alkali, operative instruments, thermal cauterization and drugs, even like a virulently poisonous serpent.”

Practice in Venesection

सिरासु शिक्षितो नास्ति चला ह्येताः स्वभावतः ।
मत्स्यवत् परिवर्तन्ते तस्माद्यत्नेन ताडयेत् ॥

सु. शा. ८, २०.

“No one can be said to be fully skilled in venesection. For these veins and arteries are naturally always vibrant with motion. Like fish they are ever moving. Therefore should the physician venesect with great care.”

Clinical Examination

The greatest importance to practical training is given in the clinical examination of the patient.

प्रत्यक्षतस्तु खलु रोगतत्त्वं बुभुक्षुः सर्वैरिन्द्रियैः सर्वानिन्द्रियाधानातुरशरीरगतान् परीक्षेतान्वत्र
रसजानात् । च. वि. ४, ७.

“Seeking to know the nature of a disease by direct observation, the physician should explore by means of his sense-organs, with the exception of the tongue. The entire field of sensible data presented by the patients body.”

सर्वथा सर्वमालोच्य यथासम्भवमर्थविद ।

अथाध्यवस्येत्तत्त्वे च कार्ये च तदनन्तरम् ।

च. वि. ४, १०.

“Having considered all factors and from all points of view, as far as is possible, the learned physician should, thereafter, formulate his opinion first as regards the nature of the disease and next as regards the line of treatment.”

त्रिदितवेक्षितव्यास्तु भिन्नजः सर्वं सर्वथा यथासंभवं परीक्ष्य परीक्ष्याध्यवस्यन्तो न क्विदपि
विप्रतिपद्यन्ते । च. वि. ७, ४.

“The physicians, knowing all that is to be known, examining everything in every respect possible and diagnosing after full investigation, will never be mistaken and will be able to achieve the desired result.”

प्राज्ञास्तु सर्वमाज्ञाय परीक्ष्यभिह सर्वथा ।

न सञ्जलन्ति प्रयोगेषु भेषजानां कदाचन ॥

च. वि. ७, ७

“But the wise ascertaining, in every way, everything that is to be examined will never blunder in the proper line of treatment.”

इति वर्णस्वरायुक्तौ लक्षणार्थं सुसुर्षताम् ।

यस्तु सम्यग्निद्रजानाति नायुज्ञाने स सुह्यति ॥

च. इ. १, २६

“Thus are declared the signs and symptoms of fatal prognosis in the subject of complexion and voice. He who knows these thoroughly well, will not be confused in the art of prognosis.”

एतान्सूक्ष्मद्वयान्वहृन्भावान्यः स्युःशब्दबुध्यते ।

आतुरे न स संमोहमायुर्ज्ञानस्य गच्छति ॥

च. इ. ३, ७

“The physician who by palpation ascertains these various palpable signs, will never be confounded in the matter of prognostic knowledge of the life-span of a patient.”

एतदिन्द्रियविज्ञानं यः पश्यति यथातथम् ।
मरणं जीवितं चैव स भिषग्ज्ञातुमर्हति ॥

च. इ. ४, ३७

“The physician who perceives these foreboding symptoms of the sense-faculties in their right nature knows the death or survival of a patient.”

इतीदमुक्तं प्रकृतं दधानतथम्
तदन्ववेक्ष्य सततं भिषग्विदा ।
तथा हि सिद्धिं च यथाश्च साध्यतश्च
स सिद्धिर्लभते धनानि च ॥

च. इ. १२, ९०

“Thus we have propounded the subject under consideration correctly. The student of the medical science should pay constant heed to it. Thus alone, will he become a successful practitioner, securing for himself success, enduring fame and riches.”

सुदुर्लभं रोगाणां सन्निधातुं च ।
अवेक्षमाणस्तु भिषक् चिकित्सायां न दुर्गति ॥

च. चि. ३०, ३०६

“The physician who keeps on observing repeatedly the development of diseases and the condition of the patient will not err in treatment.”

परीक्षणधारिणो ह कुशला भवन्ति ।

च. सू. १०, ५

“Hence those alone that act after investigation are considered wise.”

वृद्धिस्थानक्षयावस्थां रोगाणामुपलक्षयेत् ।
सुदुर्लभामपि च प्राज्ञो वेदामिवलचेतसाम् ॥
व्याधयवस्थाविशेषानिह ज्ञात्वा ज्ञात्वा विपक्षणः ।
तस्यां तस्यामवस्थायां चतुःश्रेयः प्रपद्यते ॥

च. नि. ८, ३६-३७

"The wise physician should carefully investigate even the minutest changes in the hypertrophy, normality and the atrophy of the morbid element as well as the strength of the body, gastric fire, vitality and mind.

The circumspect physician, constantly observing the variations in the stages of the disease should prescribe such treatment as is helpful in attaining the fourfold blessing of therapeutics."

Caraka is even so particular as to prescribe that the clinician must possess the normal and healthy condition of the mind and hands which are used to examine the patient.

तन्माद्व्याधीन्मिपगतुपहतसत्त्वबुद्धौत्वादभिर्माविर्भयादनुबुध्येत ।

च. नि. १, १३

"Therefor the physician who is of sound mind and understanding should know accurately the diseases from the view-points of etiology and symptomatology etc."

स्पर्शमवाप्येनैवातुरम्ययुपः प्रमाणावशेषं जिज्ञासुः प्रकृतिस्थेन पाणिना शरीरमप्येवमं
सृशेत् परिमर्शयेद्वा ।

च. इ. ३, ४

"The physician desirous of ascertaining by the method of palpation the measure of life left to the patient, should palpate the latter's entire body with his hand which must be in a normal condition. If it is not so he should get the palpation done by someone else."

सूक्ष्मसूक्ष्माः समीक्ष्यैषां देवौषधनिरूपणे ।

यो वर्तते चिकित्सायां न स स्खलति जातुचित् ॥

अ. ह. सू. १२, ६८.

"One who investigates very minutely all these in the determination of the morbid condition as well as in deciding the line of treatment and then starts the actual treatment, can never fail in his task."

To illustrate the importance of constant practice, Vāgbhaṭa compares the medical training to other practical art.

अभ्यासात्प्राप्यते इष्टिः कर्मसिद्धिप्रकाशनी ।
रत्नादिसद्ब्रह्मज्ञानं न शास्त्रादेव जायते ॥

अ. द. सू. १२, ५-६

“ Practice bestows on a man true insight which leads to success in treatment even as the skill to distinguish between the good and the bad among precious stones is not derived from a mere acquaintance with the theoretical knowledge of gems.”

It must be noted that the Guru was accompanied by his students when going for clinical examination of the patient. The following Jivaka's story bears ample evidence of this fact.

Jivaka's Story

With Ātreya as his teacher, Jivaka mastered everything excellently at the slightest of instruction from his Guru. Now Ātreya was wont, when he visited his patients, to take a young Brāhman along with him. One day he took Jivaka also with him, gave him directions to administer certain remedies and then went away. Jivaka thought, 'In the present case the master has made a mistake. If the patient takes this medicine, he will die this very day. As the remedy which the master has prescribed is not good, I shall contrive an expedient.' So he left the house along with Ātreya, and said when he came back again, 'The doctor has told me not to give the medicine which he had prescribed, but a certain other remedy.' When the patient was treated in this way he became better. The next time Ātreya visited the patient, after asking how he was getting on, he gave directions that the same medicine should be given to him on the following day. Being asked whether he meant the medicine which he had prescribed first or that which he had afterwards ordered, he said, 'what did I prescribe first and what afterwards?' He was told, 'You prescribed the one when you were present here; about the other you gave orders to Jivaka.' He said to himself, 'I made a mistake. Jivaka is endowed with great insight'. Then he said that the medicine which Jivaka had prescribed was to be given.

Ātreya became well pleased with Jivaka and took him along with him wherever he went. The Brāhman's sons, said, 'O teacher, you

are well pleased with him because he is a king's son, and you bestow instruction upon him, but none upon us.' He replied, 'That is not the case. Jivaka possesses great intelligence, and he is able to comprehend intuitively whatever I indicate to him.' They said, 'O teacher, how do you know this?' He said to the Brāhman's sons, 'Go and ask the prices of various commodities; you ask of such a one and you ask of such another'. And having so spoken, he sent them off to the market. He also gave orders to Jivaka to ask the price of a certain article. The Brāhman's sons did as they were bidden. Jivaka did likewise. But then he said to himself, 'Suppose the master asks the prices of other wares, what shall I be able to reply? I shall make myself acquainted with the prices of other commodities as well'. When they had all returned to their teacher, they rendered an account of those things which they had been ordered to do. Then Ātreya began to ask the prices of articles which he had not mentioned, saying to each of them 'O Brāhman's son, what does this commodity cost?' He whom he questioned, replied that he did not know. In like manner did the others make reply when he questioned them. But Jivaka, when he was asked told him the price of every kind of goods.

'O Brāhman's sons', said Ātreya, 'have you heard?'

'Yes, we have heard.'

'Behold, this is the reason why I said that Jivaka, as he is possessed of remarkable insight, intuitively comprehends any matter, intimation being given to him'.

Impetus For independent Thinking and Reasoning

Caraka is not satisfied that the Vaidya should limit himself to the knowledge he has acquired from his Gurn, but he requires that he should enhance it by thought and practice.

न चैकान्तेन निर्दिष्टमेकान्तेन समाश्रयेत् ।

स्वयमप्यत्र वैद्येन तत्पर्यं बुद्धिमता भवेत् ॥

उपपद्येत हि साऽवस्था देशकालरत्नं प्रति ।

“ But the intelligent physician should not determine this according to the letter of these directions exclusively, but must use his own discretion and reasoning in arriving at decisions in situations in view of their nature of place, time and the vitality of a particular patient.”

तस्मात्सत्यपि निर्देशे कुर्याद्ब्रह्मं स्वयं धिया ।
विना तर्केण या सिद्धिर्यदृच्छासिद्धिरिव सा ॥

च. सि. २, २८.

“ Hence despite the directions laid down, therapeutic measures should be decided upon by the physician, with the use of his own discretion. The success achieved without the exercise of reason is indeed success resulting from chance”.

स्वबुद्धयेवं सद्व्यापनं केटीवापि प्रकल्पयेत् ।
बहुप्रत्ययविकल्पत्वाद्योगसंख्या न विद्यते ॥

च. क. १२. ५०.

“ According to one's own intelligence, thousands and millions of preparations may be made. As the combinations of drugs are very numerous, there can be no limitation to the extent of their combinations”.

Caraka condemns vehemently those who do not possess practical art.

श्रुतदृष्टक्रियाकालमात्राज्ञानबहिष्कृताः ।
वर्जनीया हि ते मृत्योश्चरन्त्यनुचरा भुवि ॥

च. सू. २९, ११.

“ Such persons, outcastes from the science of healing both theoretical and practical and of time and of measure, are to be shunned, for they are the messengers of death on earth.”

Suśruta who valued so highly the diagnosis of the formation of pus in the body pours out his hatred for the ill-trained man who blunders in diagnosis.

आमं विपच्यमानं च सम्यक् पक्वं च यो मिषक् ।
जानीयात् स भवेद् वैद्यः शोषास्तरुकरवृत्तयः ॥

सु. सू. १७, ६.

“The medical man that can distinguish the non-suppurated, the suppurating and the fully suppurated conditions is alone the true physician while the rest are charlatans living on deceit.”

यश्छिन्नस्याममङ्गानाद्यश्च पश्यमुपेक्षते ।

श्वपचाविव मन्तव्यौ तावनेश्चित्तकारिणौ ॥

सु. सू. १७, १०.

“He who out of ignorance undertakes to cut open a non-suppurated swelling and one who fails to open up one that is ripe, both being devoid of discrimination in the science are to be regarded as out-castes.”

Adhyapana or Instruction

The next method, more correctly a next step in the method of education was Adhyāpana or exposition before others. This method was regarded important in making the subject clear to the person himself and enabling him to acquire a knack for imparting it to others.

अध्याप्यमव्यापयन् ह्याचार्यो यथोक्त्याध्यापनकलैर्द्योगज्ञानोत्पत्तेश्च बुक्तः श्रेयसर्गुरुर्नः ज्ञानमा-
स्मानं च युनक्ति । इत्यध्यापनविधिरुक्तः ।

च. वि. ८, १४

“The teacher who teaches the worthy disciples will obtain all the auspicious fruits of teaching, to be described and even others not described here and obtains all auspicious qualities for himself as well as for his disciple. Thus has been described the method of instruction.”

The method of teaching (अध्यापन) was exposition which consisted of expounding the subject before students; senior students and post-graduates acted as junior teachers and it formed a part of their own training. This method helped to produce efficient teachers of the science. That a sound and thorough mastery and not any haphazard learning was the ideal enforced, is clear and that thoroughness was relentlessly aimed at both by the master and the pupil, is fully borne out.

Clinical Discussions And Conferences

The third method of the acquisition of knowledge was the discussion with the men of his own line of learning after he has fully acquired his scholarship and skill in exposition, that gives the final finishing of his proficiency and enlarges his field of vision by throwing light on many an obscure point and sharpens his wits and methods of cogent argument. He becomes then an adept in the full sense of the term. This would correspond to the clinical meetings of the colleges and conferences of the present day.

Logic was one of the subjects in secondary school education. Logic was the foundation for the scientific medicine. And if the medicine is to be maintained on scientific level, every medical man should be taught the basic principles of logic. Otherwise the doctor, devoid of logic, will convert the scientific medicine into dogmatic practice.

संभाषाविधिमत ऊर्ध्वं व्याख्यास्यामः—भिषक् भिषजा सह संभाषेत । तद्विषयसंभाषा हि ज्ञानाभियोगसंहर्षकरी भवति, वेगारयमपि चाभिनिर्वर्तयति, वचनशक्तिमपि चाधत्ते, यशश्चाभिदीपयति, पूर्वश्रुते च संदेहवतः पुनः श्रवणाच्छ्रुतसंशयमपवर्षति, श्रुते चासंदेहवदो भूयोऽप्यवनायमभिनिर्वर्तयति, अश्रुतमपि च कञ्चिदर्थं श्रोत्रविषयसापादयति, यच्चाचार्यः शिष्याय श्रुश्रूषवे प्रमन्नः क्रमेणोपदिशति गुह्याभिमतमर्थं जातं तत् परस्परं सह जल्पन् पिण्डेन विजिगीषुगृह संहरात्, तस्मात्तद्विषयसंभाषामभिपश्यंसि कुशलाः ॥

च. दि. ८, १५.

"We shall hereafter expound the method of discussion. A physician should discuss with another physician. Discussion with a person of the same branch of science is indeed what makes for the increase of knowledge and happiness. It contributes towards the clarity of understanding, increases dialectical skill, broadcasts reputation, dispels doubts regarding things heard by repeated hearing and confirms the ideas of those that have no doubts. It enables one to hear a few new things in the course of discussion. Sometimes, secret meanings, which the teacher imparts to the ministering disciple in a propitious moment gradually, the excited disputant, desirous of victory reveals in the process of discussions. Hence it is that discussion with men of the same branch of science, is applauded by the wise."

That the medical conferences were held for the advancement of the science and for the acquisition and spread of knowledge, has already been described in the course of this chapter.

Scientific Concept

All these methods, rules and regulations and the meticulous study of logical postulates aimed at one thing and that was to make medicine a scientific structure of practical utility.

These facts clearly bear out and are certainly convincing enough that the ancients had developed and maintained a high standard of theoretical science and practical art of the medical profession; and when one reads:

समग्रं दुःखमायत्तमं ज्ञाने दृष्टाश्रयम् ।
सुखं समग्रं विज्ञाने दिष्टे च प्रतिष्ठितम् ॥
इदमेवमुद्गारार्थमज्ञानां च प्रकाशकम् ।
शास्त्रं दृष्टिः श्रुतिः यथैव हि तन्मूलम् ॥

च. सु. ३०, ८४-८५.

"The whole of suffering which cleaves to mind and body has ignorance for its basis and (conversely) all happiness is founded in clear scientific knowledge. However this very knowledge of mighty import is no illumination to those who are devoid of understanding, as is the orb of the sun to those who have lost their eye-sight. "

One comes to the conclusion that a vital essence of success or failure of the medical profession depends upon one factor and that is whether the medical knowledge is purely scientific or otherwise. If it is scientific, it would lead to happiness and success; if it is unscientific it will bring misery and unhappiness. Added to this when we read the following aphorism showing the importance attached to the study of the whole as against the part, our heads bow down with veneration to these Mahārṣis.

न हि ज्ञानावयवेन कृत्स्ने ज्ञेये विज्ञानमुत्पद्यते ।

च. बि. ७, ४.

" A full conception of the science will never be attained by the knowledge of only a part of it. "

The physician therefore was required to be fully equipped for such clinical tests, to be sound of judgement and to be keen in his

sense-perceptions. It is no wonder that with such meticulous elaboration of the methods of examination, the physicians of India were far-famed in the past for their skill in diagnosis and healing. This medical glory of India was at its zenith during the time beginning with the period just preceding Buddha until the 8th century A. D., when the physicians of India were invited to Jundishapur and Baghdad for consultation and were put in charge of the hospitals. Its highest achievement was during the period of Aśoka when the culture of India was carried across her oceans to the south, and the mighty mountains and the table-lands to the north. The greater India of that day including Tibet, parts of Java, Sumatra in the east and extending up to Bactria and Persia, almost upto the shores of Greece, in the west, was built not by military conquest, not by invasions and commercial exploitation but by the devout and humanitarian priests and missionaries who carried the sacred words of knowledge and the means of healing along with them. In a word, they possessed the means of healing, both spiritual and physical. That is an ideal that India of ancient times pursued without laying herself open to the charge of imperialism and exploitation in the wrong sense. Hers was the imperialism of the spirit and of knowledge whose empire knew no bounds not even of time and space, and transcended the distinctions of race, color, and religion. In a word her domain was the heart and soul of man i. e. of all mankind and she built it up with all the strength at her command.

CHAPTER XI

INSTITUTIONS AND UNIVERSITIES

The Rishi-kula

Cardinal Newman says that a University is an assembly of learned persons. According to this definition, each and every Ṛṣi family was an autonomous university where the atmosphere of learning and scholarship, sacrifice, worship and self-realization prevailed. These unitary Ṛṣi-kulas or educational settlements developed into a form more complex, first as Āśrama-kulas conducting their studies in the calm and cool shades of the forest and later on as Guru-kulas which were the urban proto-types of the former. Both these rural and urban Kulas were doing the work of universities. The Āśrama-kulas being

situated in the forests resembled the residential universities while Guru-kulas were like the affiliating and partly residential universities.

Such Āśramas were as a rule situated in places where nature was bountiful and pleasant. Some of these Āśramas have become immortalised in the history of our culture. Naimiṣāraṇya (नैमिषारण्य) is famed in the Purāṇas. Janasthāna (जनस्थान) stands in the forefront of the Rāmāyaṇa while the Āśrama of Kaṇva Ṛṣi, described in the Māhābhārata and immortalised by that prince among Indian poets Kālidāsa, is even today looked upon with great reverence and awe by the research scholars.

Vyāsa (व्यास), Dhaumya (धौम्य), Agastya (अगस्त्य), Vasiṣṭha (वसिष्ठ), Viśvāmitra (विश्वामित्र), Jābāli (जाबालि), Vālmiki (वाल्मीकि), Kaṇva (कण्व) and other Ṛṣis have attained great renown. Some of these Ṛṣis had ten thousand pupils studying under their direction and these Ṛṣis were addressed by the honoured title of Kulapati (कुलपति).

शिष्याणां दशबाह्वं योऽन्नदानपुरस्सरश्च ।

साङ्गानध्यापयेद्वेदान् स वै कुलपतिरुच्यते ॥

“He is verily called a ‘Kulapati’ who teaches along with all their branches the four Vedas to ten thousand students with free lodging and boarding”.

University Education

Admission to these universities was by no means easy. The gates of the university were guarded very scrupulously by erudite scholars who held the entrance examination. Only passing through a stiff test could one gain entrance to this revered temple of learning. The members of the admission committee were aptly called Dvāra Paṇḍitas (द्वारपण्डिताः) who were zealous in maintaining the scholarship by preventing the entrance of mediocres. The final test for graduation or completion of study was equally hard. The examination committees used the Śalākā-parikṣā test in which the candidates were required to explain that page of the text-book which happened to be the last when picked up by a Śalākā or a needle.

Buddha Viharas as Universities

As men got entangled more and more in the worldly affairs, the Ṛṣi-kula was eventually superseded by the Guru-kula. The Guru-kula tried to maintain the best tradition of the Ṛṣi-kula as far as it

was possible in its new environments. Consequent upon the disorganisation of Brāhmanism when Buddhism came in the ascendance, it took up the link and continued to impart education in the Vihāras (religious places) almost on the lines of the Guru-kulas in a systematic way. We have adequate information regarding the Buddhistic Vihāras. The manner in which they were utilized as universities was really admirable. Amongst these educational institutions the universities of Takṣaśilā (तक्षशिला), Kāśī (काशी), Nālandā (नालन्दा), Udāttapurī (उदात्तपुरी), Jagaddalā (जगद्दला), Mithilā (मिथिला) and Navadvīpa (नवद्वीप) have earned fame in the scholastic world. Takṣaśilā was situated about 20 miles west of modern Rawalpindi. Valabhī was in Saurāṣṭra, while the others were in the Gangetic valley. Here thousands of people flocked together to quench their thirst for knowledge. There was a continuous flow of admiring pilgrims for getting the merit of having Darśana (दर्शन auspicious sight) of these religio-educational sanctuaries. It was considered a high honour for foreign scholars to get admission into these temples of learning. It was due to the world-wide fame of these educational institutions that men like Fa Hyan and Huen Tsang came all the way from China, travelled through the whole of Āryāvarta and left for us priceless accounts of their experiences. The high personages like the mighty chancellors Śīla-bhadra (शीलभद्र), Dīpaṅkara (दीपङ्कर) and Atīsa (अतीस) had by their unrelenting studiousness made these universities universally lovable and popular.

Courses of Study

The full list of the study courses included Vedic literature. The Vedas (prayer books), the Brāhmaṇas (sacerdotal texts), the Upaniṣads (spiritual discourses), the Sūtras (aphorisms), Sanskrit literature, history, geography, Purāṇas (ancient history), poetry, drama, arts and science, phonetics, grammar, vocabulary, prosody, rhetorics, philosophy, astronomy, astrology, geometry, trigonometry, arithmetic, algebra, medicine, military science, lands, marine sciences, commerce and industry, the Dharma Śāstra (religion), the Smṛti (law), the Arthaśāstra (political economy) and religious scriptures—this comprehensive course of study was taught by the universities according to their needs and resources. Takṣaśilā had a

very famous medical college. The military academy of Takṣaśilā was also famous. Nālandā was noted for its library. Kāśī paid more attention to Vedānta (philosophy) and Nyāya. Tantra Vidyā (incantation of religious magic) and magic were popular at Vikramaśilā. Mithilā excelled in Navya-nyāya (neo-logic). Navadvīpa specialised in Hetuvidyā (logic). Each Vihāra had valuable stores of books and to avail themselves of their benefit, students paid frequent visits to these places.

Chinese Pilgrims' Accounts

The best accounts of the University are furnished by the two Chinese pilgrims to India viz., Yuan Chwang who travelled in India for 16 years i. e. 629-645 A. D. as a student of Buddhism, of which he spent five years as a student at the university of Nālandā, and It-sang who spent ten years i. e., 675-685 A. D. as a student there. Yuan Chwang states that foreign students came to Nālandā to put an end to their doubts and then became celebrated. At the entrance examination of the university only about 20 could pass and 80 failed to get admission. The university thus comprised really the picked scholars who could take their part in its academic life of the highest standard as represented in its ' schools of discussions ' of which the university was mainly made up. To be a student of Nālandā was thus the highest academic distinction of the day. Yuan Chwang states, "Those who bore the name of 'Nālandā brother' were all treated with respect wherever they went". Yuan Chwang supports the claim by stating that the students of Nālandā were looked upon as models.

Taxila

Taxila (*तक्षशिला*) situated about 20 miles west of Rawalpindi in the North-west provinces was undoubtedly the most important seat of learning in ancient India. It was the capital of the then important province of Gāndhāra and its history goes back into hoary antiquity. But its fame rests not on its being a political capital of a province, but on its being the intellectual capital of Āryāvarta. In its halcyon days, the place resounded with the chantings of Vedic Mantras by a host of students attracted to it from the nooks and corners of the whole of India and even beyond. It was founded by Bharata and

named after his son Takṣa who was established there as a ruler. Janmejaya's serpent sacrifice was performed at this very place. Not much is known of its early educational activities but by the 7th century B. C., it loomed large as a famous seat of learning.

Its fame had spread far and wide in foreign countries and we find many glorious tributes to it in the writings of foreigners, ancients and moderns. Pliny calls it a famous city. Strabo declares it to be a large city and adds that the neighbouring country was crowded with inhabitants and that it was very fertile. Marrian described it as a large and wealthy city and the most populous between the Indus and Hydaspes. Vincent Smith, in his history, says, 'It was the leading seat of Hindu learning where crowds of pupils from all quarters were taught the three Vedas and the eighteen accomplishments. It was the fashion to send princes and the sons of the well-to-do Brāhmaṇas on attaining the age of sixteen to complete their education at Taxila which may be properly described as a University town. The medical school there enjoyed a special reputation but all arts and sciences could be studied under the most eminent professors.' Dr Hoernle says, 'According to another non-medical line of Indian tradition preserved in the Buddhist Jātakas or Folk-lore, there existed in India in the age of Buddha two great universities or seats of learning in which all sciences (सर्वविद्याणि or सर्वशिल्पाणि) including medicine were taught by professors of world-wide renown (द्विस पामोखा आचारिभ or दिशाप्रमुखाचार्य). These two universities were Kāśī or Benares in the east and still more famous Takṣaśilā on the Jhelum river in the west. In the latter university, at the time of Buddha or shortly before it, the leading professor of medicine was Ātreya. He accordingly should have flourished at some time in the sixth century B. C.'

We find references to the origin of Taxila in the Rāmāyaṇa as follows:-

इतेषु तेषु सर्वेषु भरतः केन्द्रीयुतः ।

निवेशयामास तदा समृद्धे द्वे पुरोत्तमे ॥ १० ॥

तक्षं तक्षशिलायां तु पुष्कलं पुष्कलावते ।

गन्धर्वदेशे रुचिरे गान्धर्वविषये च सः ॥ ११ ॥

‘As they were all killed, Bharata, the son of Kaikeyī built up two prosperous cities and placed Takṣa in Takṣaśilā and Puṣkala in Puṣkalāvata in the beautiful country of Gandharvas and in the province of Gāndhāra respectively.’

In Mahābhārata also there is a similar reference.

तेन वै मुक्ता आतरस्तस्य तथा चक्रुः स तथा भ्रातृन् मन्दिष्य तक्षशिलां प्रत्यभिप्रतस्थे तं च देशं
वशे स्थापयामास ॥ १० ॥

न. भा. आ. प. अ. ३

“The brothers sent by him went out as desired. Having instructed his brothers thus, he attacked Takṣaśilā and subjugated it”.

This famous university not only attracted students from far off places in India like Rājgrha, Mithilā, Benares, Ujjain, Kuru, Kośala etc., but from foreign countries also like Babylonia, Miśra (Egypt), Phoenicia, Syria, Arabia, China and Greece. It was a university to which a number of Indian institutions were affiliated. It furnished an ideal to foreign countries for moulding their universities on its lines. The Alexandrian school which was established in the 4th century B. C. and which could boast of 14000 students, was probably the result of inspiration derived from Takṣaśilā during Alexander’s invasion of India.

The presence of world-renowned teachers, who were authorities in their subjects, experts and specialists of the various branches of learning was its forte. It was a place where the finishing touch to education was given as graduation from it marked the completion of one’s studies.

The catholicity of the curriculum amazes the student of history. Medicine, surgery, allied military arts, astronomy, astrology, divination, accountancy, commerce, agriculture, conveyancing, magic, snake-charming, finding hidden treasures and mines, dancing and painting were the main subjects taught besides the Vedas and the eighteen accomplishments.

The subjects were taught under the supervision of expert teachers. Each teacher had his own institution having on its role

about 500 students. We learn that one teacher of the military science had all the princes of India studying under him, numbering 103.

The brilliant teachers and the variety of subjects attracted the cream of the intelligentia and we can count among the luminaries of this intellectual alma mater of India such famous names as Cāṇakya (चाणक्य), Pāṇini (पाणिनि), Jīvaka (जीवक), Vyādi (व्याडि), Kumāralabdha (कुमारलब्ध), Aśvaghoṣa (अश्वघोष), Deva (देव), Nāgārjuna (नागार्जुन), Ātreya (आत्रेय), Brahmadaṭṭa (ब्रह्मदत्त), Junāha (जुनाह) and a host of others. No doubt it won the popular epithet of the "Queen of learning."

The enrolment of students from distant lands reflects very favourably on the soundness of its educational system. Travel in those days was more than an adventure, it was a hazard. It took months to reach a place where it would now take as many hours. It was usual for a person to distribute his property among his heirs and relatives and bid them adieu before starting on a pilgrimage because the hazards and the rigours of travel were such that if a person safely returned from his travels, it was considered to be nothing short of a miracle. And yet parents unhesitatingly sent their sons to Taxila for the acquisition of knowledge at the tender age of 16, the same age limit as is found in modern universities. The course lasted from 5 to 7 years and the students could not return to their homes every four or six months as students of our age can, because the means of communication as we know them today were not existent then.

Fees

Fees were levied. 1000 pieces of the-then current coin was the fee for the course to be paid at the time of enrolment whereas the students who were not able to pay fees rendered personal service to the teacher in lieu of the fees. On completion of study, a lump sum or some other gift was given to the teacher as Guru Dakṣiṇā (गुरुदक्षिणा) according to the students' capacity.

The university was largely supported by public contributions. Handsome donations from princes to the university were always forthcoming. Besides the students and the staff were often invited

and entertained to meals by the public. We find an instance where a school of 500 students was invited for a dinner by a country family. Often a similar entertainment was given by the whole village.

Some students were married persons and maintained their own household and attended to their studies. Those who could afford were allowed to stay in their own homes. There is the instance of prince Junah of Kāśī who was running an independent house for himself while he attended his college at Taxila.

The admission was strict but the strictness was with regards to the intellectual level of the students seeking admission. But the caste or poverty never formed a barrier, the only exception being that of the Cāṇḍāla. This will be evident when we find that there were youths from Kṣatriyas, Brahmins, princes, noblemen, merchants, tailors, fishermen and others among the students. There is a story that a Cāṇḍāla of Ujjainī got admission to the university by resorting to disguise.

Caste not only did not hamper admission into the university, but it also did not restrict the student in the choice of his subject. This freedom of choice of subjects is evident from instances where we find a Brahmin learning magic and charm, another Brahmin learning the art of hunting, still another studying archery and yet another pursuing practical science. Caste, thus had lost its sting if it ever then had, before the charms of this intellectual capital of Āryāvarta.

Like caste, class distinctions also were a thing foreign to this university. A perfect democratic spirit pervaded throughout, and princes, merchants and poor students, all lived as fellow-students under the same strict discipline.

The senior students were given the chance to work as assistant teachers to enhance their grasp of the subject. Shift system was also adopted and day and night classes were held.

We have ample proofs to learn that the courses of study were not merely theoretical. The knowledge of both theory and practice was imparted. Many students gave a finishing touch to their practical work by travels in various countries. Taxila was especially

noted for its medical school, law school and the school of military science. These schools were very famous and the last named school could boast of having all the princes of India of the time as already stated as its students. The arts of healing and war were the specialities of Taxila although it included all other branches of learning.

Taxila stood in so high an esteem that pupils from various universities also were drawn to it. There is a story of a student Seta Ketu, of Benāres, who went to Takṣaśilā for further studies. On his return, he went to a village where a group of 500 ascetics taught him the arts.

The university at Benares was a later development, moulded on the lines of Taxila by students from Taxila. It flourished from 7th B. C. to 12 A. D. We find that the Benares boys were drawn to Taxila but we do not find any references of Taxila boys going to Benares. The most brilliant and outstanding feature of pride of the Benares university of those days was its school of surgery.

There were many minor but important centres of learning at the time. One such was the Himalayan school situated at Kanakhal near modern Haradwar where Kāśyapa (कश्यप) the author of Kāśyapa Saṃhitā was the great teacher. It was primarily famous as a school of Pediatrics. Similarly Videha (विदेह) was also noted as a seat of learning for diseases of the eye.

Nālandā was the largest residential university that India has ever seen. The area covered by it was 1 mile long and 1/2 mile broad. This area had a high wall round the buildings. Well-planned large and small buildings with 8 big halls and 300 lecture rooms is but a modest description of the centre of learning, which was a monastery and university combined into one. The University building was six-storeyed. The population comprised of 10000 pupils and over 1500 lecturers and teachers. Over 1000 scholars of high repute were proud of having the honour to reside in the university. This, together with the executive and menial staff, reached a staggering figure. The university undertook a heavy burden of obligations towards the population. It undertook to give its

students and teachers free lodging, free food and clothing and free tuition and medicine. There was no idea of deriving part of its expenses from the income of fees levied on the students (as is done in modern times.) Education was free. This was possible due to the liberal grants made for the purpose by royal and private philanthropy. The University of Nālandā was royally patronized by Gupta rulers. It is also stated that as many as 100 chairs or pulpits were arranged every day for the lecturers or discourses to be delivered by as many different teachers.

Admission was very strict. Only 2 out of every 10 applicants were admitted, thus preserving the very high intellectual standard for which the university was world-renowned. It could boast of students hailing from such far away countries like China, Korea, Tibet, Tokhara, Mongolia, Japan and the Indian Archipelago. Considering the scarce and difficult means of communications of this distant age, this cosmopolitan nature of the students is amazing.

Its Library

Library was considered to be the most essential constituent of such a university. It was proverbial to say that a monastery without a library was like a castle without armoury. This Nālandā university had three buildings reserved for library. They were nine-storeyed buildings containing rare and sacred books. The library quarter was known as Dharmagañja (धर्मगञ्ज), the mart of religion.

Munificent donations, not only from the local Gupta kings, but from Bengal rulers and rulers of Java and Sumatra made it possible for the Kulapatis to supply all the requisite clothes, food, bedding and medicine absolutely free. The requisites obtained, the students could concentrate on study with nothing to worry about. It thus became an institute for higher or specialized learning. Its scholars after finishing their education travelled to China, Arabia, Tibet and other places and organised medical work — a subject which was an important item in the curricula. These sacrificing scholars made it their mission to carry the banner of Indian learning and culture to

foreign countries. so as to build up a greater India far beyond the geographical boundaries of India proper. This peaceful cultural conquest, the greatest achievement of the Indian system of education as practised in the past, helped in creating a holy halo round this great temple of learning, and attracted students from all parts of the world to beg at India's doors for the alms of knowledge that provided lasting satisfaction to the greater glory of the donors as well as the recipients. It thus justified its name of the University (विश्वभारती) by attracting students from the whole world. It was in fact an international university, like the modern Oxford and Cambridge universities. Chinese travellers have left valuable accounts of their travels from which we can get a glimpse of the glory of India that was greater than we are wont to believe.

Nālandā was particularly a research institute for advanced students and was so to say the supreme court of judges of intellectual worth. Any new theory or hypothesis had to obtain its stamp to become current coin. The highest distinction bestowed by the university was the Fellowship or brotherhood of Nālandā. The students of Nālandā were looked upon as models by all India and were respected everywhere.

All subjects were taught in this university. Medicine was one of the subjects. Logic was compulsory for all and was given great importance. There was an astronomical observatory and a water-clock which gave correct time to the whole of Magadha.

Nālandā's alumni are names to conjure with. Nāgārjuna (नागार्जुन), Āryadeva (आर्यदेव), Asanga (असंग), Vasubandhu (वसुबन्धु), Dīnāga (दिङ्नाग), Sthiramati (स्थिरमति), Dharmapāla (धर्मपाल), Śīlabhadra (शीलभद्र) are but a few of the prodigies of which Nālandā can well be proud.

In contrast to all this glory, or rather we should say in perfect harmony with the ideals, mission and practice of this noble work of imparting education and infusing cultures, the dress of the students was the same as that of a Bhikṣu (भिक्षु). There was no caste distinction and a simple robe comprised the dress of all the students without

any distinction as regards caste or social status. They were all Bhikṣus (भिक्षु), for the greatest gifts a human being can obtain—knowledge—culture—living.

This university flourished from 450 A. D. to 12th century A. D.

CHAPTER XII

EXAMINATION, REGISTRATION AND CONVOCATION

Entrance examination

In order to maintain a lofty standard of intellectual studies pursued in the ancient universities, there was maintained an institute of Dwāra-Paṇḍitas (द्वारपाण्डितः) or entrance-paṇḍits who guarded the holy portals of the temple of learning against the intrusion of mediocre talents. These Dwāra-paṇḍits were each expert in the various subjects taught at the university. They conducted an entrance examination of the aspirants for higher studies. They were very strict in their tests. Hardly 20 to 30 % of the students succeeded in getting admission. They took scrupulous care not to make admission cheap. They were the standard bearers of the prestige and scholarship of the university. Thus the doors of the university were zealously guarded by experts who were always ready with the most difficult questions at the entrance test in order to find out the competence of the candidates seeking admissions.

Examination in General

The knowledge imparted was both theoretical and practical and the students were required to pass stiff tests in both. There is the story of Jivaka which gives us an inkling into the method of practical examination adopted in ancient days.

Practical Examination

According to the Tibetan tales, Ātreya said to his pupils, "Go to the pine hill and fetch from it that which is no remedy." The pupils went there and each of them brought back that which he thought was no remedy. But Jivaka reflected that there was

scarcely anything which is not a remedy for some or other ailment, so he brought with him only a knot from a reed and a piece of stone. He also took with him a pot which a shepherd girl whom he had cured, had given him. When they all returned to Ātreya, each of them showed what he had brought with him. Ātreya said, "Oh sons of Brāhmins, this one is of use in such and such an illness and the others in other illnesses". When Jīvaka was asked what he had brought, he said, 'Oh, teacher, all things are remedies. There exists nothing which is not a remedy. However, I have brought a knot of a reed and a piece of stone and a leavening pot'. "Of what use are these things?" "If a man is stung by a scorpion, he can be fumigated with the reed knot and healed with leavening pot and with the piece of stone can a pot of curdled milk be broken at harvest time."

The truth of this story is confirmed when we refer to Caraka Samhitā. It is said in the 12th passage of the 26th chapter of Sūtrasthāna:

अनेनोपदेशेन नानौषधिभूतं जगति किञ्चिद् द्रव्यमुपलभ्यते तां तां युक्तिमर्थं च तं तमभिप्रेत्य ॥१२॥

"In the light of this knowledge, there is in the world no substance that may not be used as medicine in this or that manner for this or that purpose."

Theoretical Examination

For the theoretical test they employed what is known as the "Śalākā Parīkṣā". This was the method adopted at the final examination in Mithilā which flourished during the thirteenth century. (Mithilā was the capital of Videha, the ancient seat of learning). The test was conducted as under. The page of the manuscript was picked up by a probe (शलाका) at random and the student was asked to explain the matter contained. This test was equally difficult as the admission test of Nālandā and Vikramaśilā controlled and conducted by the Dwāra Pandits. This Śalākā test was a test of the student's knowledge in theory.

The final examination was equally difficult. This method of test was also employed for a foreigner coming here for practice. It was

the practitioner's test. Any practitioner desirous of getting registration and the right to practise in this country, had to pass this examination before he was permitted by the State to practise.

(१) अथ भिषगादित एव भिषजा प्रष्टव्योऽष्टविधं भवति तन्त्रं, तन्त्रार्थान्, स्थानं, स्थानार्थान्, अध्यायम्, अध्यायार्थान्, प्रश्नं, प्रश्नार्थश्चेति; पृष्टेन चैतद्वक्तव्यमशेषेण वाक्यशो वाक्यार्थशोऽर्थावयवशश्चेति ॥

च. सू. ३०, ३२

'Now a physician should be examined by another physician on eight topics viz., the system and its interpretation, the main sections of the system and their interpretation, the chapters (in each section) and their interpretation, and the questions and their interpretation; and thus being examined, he should give his answers, leaving out nothing, by verbatim quotations, by explanations of the quotations and by further elucidations of difficult parts of the explanations.'

(२) तत्राह-कथं तन्त्रादीनि वाक्यशो वाक्यार्थशोऽर्थावयवशश्चोक्तानि भवन्तीति ॥१३॥

अत्रोच्यते—तन्त्रमार्थं कास्त्र्येन यथाम्नायमुच्यमानं वाक्यशो भवत्युक्तम् ॥१४॥

बुद्ध्या सम्यगनुप्रविश्यार्थतत्त्वं वाग्भिर्व्याससमासप्रतिज्ञाहेतूदाहरणोपनयनिगमनयुक्ताभिन्नि-

विश्लिष्यबुद्धिगम्याभिरुच्यमानं वाक्यार्थशो भवत्युक्तम् ॥१५॥

तन्त्रनियतानामर्थदुर्गाणां पुनर्विभावनैरुक्तमर्थावयवशो भवत्युक्तम् ॥१६॥

च. सू. ३०.

"The question arises—How is the system and the rest expounded verbatim, or with comment or with detailed elucidation ?

To this the answer is—When a system promulgated by a seer is recited in its entirety and in the order of its (original) enunciation, then it is said to be delivered verbatim.

When, having penetrated into the truth of its meaning by means of the understanding (a system) is propounded in words that are elaborate or succinct (as the occasion may demand) by the method of proposition, reason, analogy, application and conclusion, and in a manner that is intelligible and appealing to the three types of student-mind, then it constitutes an exposition (of the system) with comment.

When the difficult passages occurring in the treatise are elucidated by further glosses, then the exposition is called a detailed elucidation".

This could discriminate real scholars from quacks.

विद्यासमाप्तौ भिषजो द्वितीया जातिरुच्यते ।

अधुते वैद्यशब्दं हि न वैद्यः पूर्वजन्मना ॥ ५२ ॥

विद्यासमाप्तौ ब्राह्मं वा सत्त्वमार्षमथापि वा ।

ध्रुवमविशति ज्ञानात्तस्माद्वैद्यो द्विजः स्मृतः ॥ ५३ ॥

च. चि. ३.

"On the completion of his studies, the physician is said to be 'reborn' and acquires the title of 'physician'. For no one is a physician by right of birth.

On the completion of his studies, the spirit of revelation or of inspiration of the truth descends into the student. It is by reason of this initiation then, that a physician is called a 'Dwija' or a twice-born one".

Registration

A graduate in medicine had to obtain king's permission to embark on his professional career. It was the duty of the state to protect its people not only from external invaders and depredators but even from the robbers and bandits within as well as those other robbers, bandits and cheats that might rob people of their money and even life in the guise of a friend, adviser and healer. It was to prevent the ravages of the internal enemies that registration of responsible professions such as the lawyer's and the doctor's has come into being. This obtained even in ancient India where the State took proper care to eliminate by strict methods the charlatan and the ignorant but ambitious crook, from endangering the welfare of the people. The men that had studied the science well, had acquired proper skill in the practice and had passed all theoretical and practical examinations could set up practice only after obtaining the permission of the king or the state. Such a registered practitioner, who received the approval of the state, entered "Viśikhā" (विशिखा) meaning the cessation of the student life (when he had to keep the tuft) and the actual entrance into professional life.

अधिगततन्त्रेणोपासिततन्त्रार्येण दृष्टकर्मणा कृतयोग्येन शास्त्रं निगदता राजानुज्ञातेन.....वैद्येन
विशिखाऽनुप्रवेष्टव्या ।

सु. सु. १०, ३.

"Having studied the science, having fully grasped the meaning, having acquired practical skill and having performed

operations on dummies, with ability to teach the science and with king's permission, a physician should enter into his profession.

The need for such testing and previous approval of a physician before setting up his practice is explained by pointing out the duty of the king to protect his people from the harm that might otherwise befall them at the hands of false men who easily put on the airs and apparel of the real physician. The existence of such bogus men was considered a blot on the king and the state.

अतो विपरीत। रोगाणामभिसरा, हन्तारः प्राणानां, मिषक्लृप्तप्रतिच्छन्नाः कण्टकभूता लोकस्य, प्रतिरूपकस्यधर्माणो राज्ञां प्रसादाच्चरन्ति राष्ट्राणि ।

च. सू. २८, ८

“Opposed to this are the votaries of diseases and the destroyers of life. These charlatans in the robes of doctors, thorns in the flesh of the whole world, with talents similar to those of mimes and mountebanks, move about in the land through the want of vigilance on the part of rulers.”

स्नेहादिष्वनभिज्ञो यश्छेद्यादिषु च कर्मसु ।
स निहन्ति जनं लोभात् कुदैद्यो नृपदोषतः ॥

सू. सू. ३, ५२.

“A quack, ignorant of the procedures of oleation and other therapies and of the operative measures of incision etc., will through greed destroy the lives of the people as a result of the king's connivance or inattention to such false physicians.”

Thus it would appear that in ancient India utmost care was taken to safeguard the welfare of the people from the unauthorized and ignorant exploiters in the name of medical men. They took care to maintain a high standard in the profession by the tests to which the applicants to the profession had to submit. In the case of foreigners, they had to pass the same rigorous examination as the final examination before having the permission to practise either by the royal physician or by a council of physicians.

Sūkrācārya lays down positively that without the permission of the king no physician should be allowed to treat.

राजाज्ञप्त्या विना नैव जनैः कार्यं विक्रित्सितम् ।

शुक्रनीति १-३, ४

Even the veterinary surgeon had to appear before the king for registration and then be allowed to practice.

The Convocation or Samavartana Ceremony

The convocation ceremony was a solemn, grave and elaborate occasion. The oath was administered to the students which contained very practical hints to the students who were on the threshold of a new life and were just to embark on the medical career.

This convocation ceremony was the remainder of the vow which he had taken at the initiation ceremony. It was called the Samāvartana (समावर्तन) ceremony, meaning thereby the returning to home of the student after finishing the course at the teacher's residence.

अनुज्ञातेन प्रविचरता पूर्वं शुर्वशौपाह्वरेण यथाशक्ति प्रयतितव्यं, कर्मसिद्धिं यशोलाभं प्रेत्य च स्वर्गभिच्छता भिषजा त्वया गोब्राह्मणमादौ कृत्वा सर्वप्राणमृतां शर्माशासितव्यमहरहृत्तिष्ठता चोपश्रिता च, सर्वात्मना चातुराणामारोग्याय प्रयतितव्यं, जीवितहेतोरपि चातुरेभ्यो नाभिद्रोघव्यं, मनसापि च परस्त्रियो नाभिगमनीयास्तथा सर्वमेव परस्वं, निमृतवेशपरिच्छदेन भवितव्यम्, अशौण्डेनापापसहायेन च, श्लक्ष्ण-शुक्लवर्म्यशर्म्यधन्यसत्यहितमितवचसा देशकालविचारिणा स्मृतिमता ज्ञानोत्थानोपकरणसंपत्तु नित्यं यत्नवता च, न च कदाचिद्वाजद्विष्टानां राजद्वेषिणां वा महाजनद्विष्टानां महाजनद्वेषिणां वाऽप्यौषधमनुविधातव्यं, तथा सर्वेषामत्यर्थविकृतदुष्टदुःखशीलाचारोपचाराणामनपवादप्रतिकाराणां सुपूर्णं च, तथैवावज्ञिहितेश्वराणां स्त्रीणामनध्यक्षाणां वा, न च कदाचित् स्त्रीदत्तमाभिषमादातव्यमननुज्ञातं भर्ताऽथवाऽध्यक्षेण, आतुरकुलं चातुरप्रविशता विदितेनानुमनप्रवेशिना सार्धं पुरुषेण सुसंवीतेनावकिशरसा स्मृतिमता स्तिमितेनावेक्ष्यावेक्ष्य मनसा सर्वमाचरता सम्भगनुप्रवेष्टव्यम्, अनुप्रविश्य च बाह्मनोबुद्धीन्श्रियाणि न क्वचित् प्रणिधातव्यान्यन्या-तुरोपकारार्थादातुरगतेष्वन्येषु वा भावेषु, न चातुरकुलप्रवृत्तयो बहिर्निश्चारयितव्याः, हसितं चायुषः प्रमाणमातुरस्य जानताऽपि त्वया न वर्णयितव्यं तत्र यत्रोच्यमानमातुरस्यान्यस्य वाऽप्युपघाताय संपद्यते; ज्ञानवताऽपि च नात्यर्थमात्मनो ज्ञाने विक्रित्यतव्यम्, आत्मादपि हि विक्रयमानादत्यर्थमुद्रिजन्त्यनेके ॥ १३ ॥

न चैव शक्ति सुतरमायुर्वेदस्य पारं, तस्मादप्रमत्तः शश्वदमिदो गमस्मिन् गच्छेत्, एतच्च कार्यम्, एवं मयश्च वृत्तौष्ठवमनस्यता परम्योऽप्यागमयितव्यं, कृत्स्नो हि लोको बुद्धिमतामाचार्यः शत्रुश्चाबुद्धिमताम्, अतश्चाभिसमीक्ष्य बुद्धिमताऽभिव्रस्यापि धन्यं यशस्यमायुष्यं पौष्टिकं लौक्यमभ्युपदिशतो वचः श्रोतव्यमनुविधातव्यं चेति । ॥१४॥

च. वि. ८

“Acting at my behest, thou shalt conduct thyself for the achievement of the teacher’s purposes alone to the best of thy abilities.

If thou desirest success, wealth and fame as a physician and heaven after death, thou shalt pray for the welfare of all creatures beginning with the cows and Brāhmaṇas.

Day and night however thou mayest be engaged, thou shalt endeavour for the relief of the patient with all thy heart and soul. Thou shalt not desert or injure thy patient even for the sake of thy life or thy living. Thou shalt not commit adultery even in thought. Even so, thou shalt not covet other’s possessions. Thou shalt be modest in thy attire and appearance. Thou shouldst not be a drunkard or a sinful man nor shouldst thou associate with the abettors of crimes. Thou shouldst speak words that are gentle, pure and righteous, pleasing, worthy, true, wholesome and moderate. Thy behaviour must be in consideration of time and place and heedful of past experience. Thou shalt act always with a view to the acquisition of knowledge and the fullness of equipment.

No persons, who are hated of the king or who are haters of the king or who are hated of the public or who are haters of the public shall receive treatment. Similarly those that are of very unnatural, wicked and miserable character and conduct, those who have not vindicated their honour and those that are on the point of death and similarly women who are unattended by their husbands or guardians shall not receive treatment.

No offering of meat by a woman without the behest of her husband or guardian shall be accepted by thee. While entering the patient’s house, thou shalt be accompanied by a man who is known to the patient and who has his permission to enter, and thou shalt be well clad and bent of head, self-possessed, and conduct thyself after repeated consideration. Thou shalt thus properly make thy entry. Having entered, thy speech, mind, intellect and senses shall be entirely devoted to no other thought than that of being helpful to the patient and of things concerning him only. The peculiar customs of the patient’s household shall not be made public. Even knowing that the

patient's span of life has come to its close, it shall not be mentioned by thee there where if so done it would cause shock to the patient or to others.

Though possessed of knowledge one should not boast very much of one's knowledge. Most people are offended by the boastfulness of even those who are otherwise good and authoritative.

There is no limit at all to the 'Science of Life.' So thou shouldst apply thyself to it with diligence. This is how thou shouldst act. Again thou shouldst learn the skill of practice from another without carping. The entire world is the teacher to the intelligent and the foe to the unintelligent. Hence knowing this well, thou shouldst listen and act according to the words of instruction of even an unfriendly person, when they are worthy and such as bring fame to you and long life, and are capable of giving you strength and prosperity."

द्विजगुरुद्विप्रमित्रप्रव्रजितोपनतसाध्वनाथाभ्युपगतानां चात्मबान्धवानामिव स्वभेषजैः प्रतिकर्तव्यं, एवं साधु भवति; एवं विद्या प्रकाशते, मित्रयशोधर्मार्थकामांश्च प्राप्नोति ।

सु. सू. २, ८

"The twice-born, the preceptor, the poor, the good and the destitute—these thou shalt treat, when they come to thee, like thy own kith and kin and relieve their ailments with thy medications. Thus behaving, good will befall thee. Thus thy learning will attain popularity and will gain for thee friends, fame, righteousness, wealth and fulfilment".

अधीत्यानुज्ञातः प्रचरेच्छुक्लवासाः संयतकेशोऽनुद्धान्तो युगमात्रावलोकी पूर्वाभिभाषी सुमुखः । न चातुरकुलमनादृतः प्रविशेत्, प्रविशंश्च निमित्तानि लक्षयेत् । न च सर्वतोऽवलोकयेदन्यत्रातुरात् । न चातुरकुलेषु स्त्रीभिः प्रेष्याभिरपि सहोपद्राघं गच्छेत्, न चाशमपूजापुरस्कृतं नाम गृह्णीयात्, मान्यस्थानेनैव तु ब्रूयात्, न च ताभिः संव्यवहारमतिप्रणयं वा कुर्यात्, न च भर्तुरविदितं स्त्रीभ्यः किञ्चिदादद्यात्, न चाविदितः प्रविशेत्, न च रहसि स्त्रिया सह ब्रूयादासीत् वा, न चैनां विवृतां प्रेक्षेत विद्वसेद्वा, प्रणयन्तीं चोपेक्षेत् न च प्रकाशयेत्, न चातुरकुलगुह्यं बहिः प्रकाशयेत्, नातुरकुलदोषान् प्रथयेत् । दृष्टादिष्टमपि चातुरं न तत्त्वं ब्रूयात्, वित्त्यमाश्वासयेत् । न मृत्युपरिगतसारीरमसाध्यरोगमनुपकरणं चोपगच्छेत्, नौषधमक्रमेणोपविशेत्, न पराधीनं कुर्यात् । न स्वयं कृतकमौषधं प्रयुजीत, सरीरौषधव्याधिवयसां चावस्थान्तरङ्गः स्यात् । नित्य-संयुतधूपोजनौषधः स्यात् । न चान्यभिसन्निविरोधं गच्छेत् । संयुक्तश्च सरीरौषधं प्रकल्पयेत् । अगल्लो निःशङ्क उपस्थितपदे

विस्पष्टं विचित्रं मृदूपनयवद् ग्राहकमविरुद्धं धर्म्यं सदा ब्रूयात् । प्रजानां हि स्वस्तिकामो भिषगिह चासुत्र
च नन्दत इति ॥ ८ ॥

अथान्यो भिषगभिषेक्षस्मै क्षमेत, सान्ना चानुनयेत् । पुनः पुनः कुरस्यन्तं तु विगृह्यादितो
ग्रन्थेनाऽवकिरेत्, न चास्य वाक्यावकाशं दद्यात् । ब्रुवतोऽपि प्रोक्तं च ब्रूयात्—नैतदेवमिति । परिहरेत्,
अपहृन्दाश्वास्य विगृह्णीयात्, अथे कुरुच्छे चैनमवतारयेत्, न चैनमवशः परयेत्, स्तोत्रगमैरवेनं धर्षयेदिति ॥ ९ ॥

का. सं. वि. ८

“Having finished his studies and permitted to leave the school, he should go about wearing white garment with clipped hair, with undeluded mind and with his eyes looking straight before him. He must be genial and take the initiative in a conversation. He must never resort to the patient's house uninvited. Having entered he must scrutinize the prognostic omens. He should not turn his gaze on anything else in the house but the patient. He should not indulge in exchanging smiles with the women or the female servants of the patient's household. He should not call the women by their names unprefixd with honorific terms but accost them in respectful terms. He must not develop a relation of intimacy or love with them. He must accept from them no gift without the knowledge of their husbands. He should not make his entry without announcing himself. He should neither stay nor talk with a woman in secrecy. He must not behold a woman when she is scantily clad or not smile at her. He should show indifference to a woman who makes amorous overtures to him and should not divulge the fact. He should not broadcast the secrets or the shortcomings of the patient's household. He should withhold from the patient the untoward prognostic signs that he may have perceived. He should continually offer consolation to the patient. He must not undertake to treat one who is on the verge of death, or one who is incurable or one who has not the means of treatment. He should not administer the medicine in the wrong order nor should he delegate the responsibility to another. He should make an altogether novel combination and administer it. He must be versed in the knowledge of characteristics of constitution, drugs, disease and age. He should always be equipped with the store of fumigating drugs, eye-salves and other medicines. He should not incur the hostility of other members of his profession. In cooperation with them

he should prepare the medications. He should be given to speech that is bold, unambiguous, prompt, vivid, charming, gentle, persuasive, comprehensive, non-contradictory and righteous. For indeed, the physician who desires the well-being of people enjoys happiness in this world as well as in the other.

If he is attacked in debate by another physician he must be able to take his stand against him. The opponent should be persuaded by gentle words. If he persists in repeatedly attacking him, he should be overpowered by hostile methods of debate and by abundance of textual authorities. The opponent should be allowed no scope of speech. If yet he persists in speech, he should be told 'not so, not so'. He should be scoffed and his grammatical errors exposed and he should be dragged into discussion of very difficult passages; but forgetting oneself one should never indulge in harsh language. One should condemn an opponent with words of seeming praise".

From the above oaths we learn that the following points were stressed upon. The graduate could not return to his place without the express permission of the preceptor. He must complete the course of theoretical text and must fix the interpretation of the same. He must have wit and the performance of actual operations himself. He must be near the poor, the poor, the appearance. He must put on white clothes, carry on umbrella, when they come to and must put on shoes. His dress must not be foppish. He must put on pure and good. His speech should not be violent. He must learn to practise any deceit. He must have a brotherly feeling towards all creatures. He must possess sufficient assistants and equipments. He is advised as to how he should proceed to the patient's place, what he should do there, how he should examine the patient, what kind of cases he should accept for treatment, what are the most difficult cases for cure and lastly, but not of the least importance is the injunction given to avoid intimate association with women. His relations with other physicians are emphasised upon and consultations with other physicians in difficult cases are strongly recommended. These oaths formed the basis of the ethics of the physician, and a physician having all these qualities, could run a successful medical career.

CHAPTER XIII

COMPLETION OF STUDY

The passing of the final test marked the completion of studies. At the end, the student was given a ceremonial bath and then he became a Snātaka (स्नातक—derived from स्ना to bathe) or the Graduate. Great importance was attached to this period of the student's life. It was the period when the graduate was on the threshold of a new life. As a matter of fact he was called a त्रिज or thrice born.

विद्यासमाप्तौ भिषजो तृतीया जातिरुच्यते ।

अश्रुते वैद्यशब्दं हि न वैद्यः पूर्वजन्मना ॥ ५२ ॥

विद्यासमाप्तौ ब्राह्मं वा सत्त्वमार्षमथापि वा ।

ध्रुवमाविशति ज्ञानात्तस्माद्वैद्यो त्रिजः स्मृतः ॥ ५३ ॥

च. वि. १ | ४

“On the completion of his studies, the physician is said to be ‘reborn’ and acquires the title of ‘physician.’ For no one is a physician by right of birth.

On the completion of his studies, the spirit of revelation or of inspiration of the truth descends into the student. It is by reason of this initiation then, that a physician is called a ‘Trija’ or a thrice-born one’.

The word thrice born (त्रिज) is explained thus:—

प्रथमा जातिः मातृगर्भतो जन्म । द्वितीया जातिरुपनयनात् । तृतीया तु वैद्यवैद्यासमाप्तौ अतः शास्त्रपारगो वैद्यः विद्यासमाप्तौ तृतीयजन्मना त्रिज उच्यते ।

“The first birth is from the womb of the mother, the second birth at the time of the sacred-thread ceremony and the third birth is at the conclusion of the medical study and when he has acquired a comprehensive insight into the science. Hence is he called a thrice-born one.”

Remuneration to the Preceptor

On being initiated as a graduate, the student requested the Guru to name the Gurn Dakṣiṇā (गुरुदक्षिणा) which he may pay immediately or later. After paying the final respects he took the permission to go home.

He would remember the Guru throughout his life and ever offer respects to him.

Post-Graduate Training

Graduation did not mark the total end of education. Nearly every student who completed his study, underwent post-graduate training. The necessity of getting post-graduate training is very clearly emphasized both in Caraka Samhitā and Suśruta Samhitā.

कृत्स्नं शास्त्रमधिगम्य शास्त्रस्य दृढतायामभिधानस्य सौष्ठवेऽर्थस्य विज्ञाने वचनशक्तौ च भूयो भूयः प्रयतेत सम्यक् ॥

च. वि. ८, ५

“Having received the whole of science, the student should, for the sake of strengthening his understanding, strive constantly and well to perfect himself in his grasp of nomenclature, the interpretation of their meaning and in the power of exposition’.

वाक्सौष्ठवेऽर्थविज्ञाने प्रागल्भ्ये कर्मनैपुणे ।
तदभ्यासे च सिद्धौ च यतेताध्ययनान्तगः ॥

सु. सु. ३. ५६

‘Having finished the study of the science, one must strive to get ability for exposition, for fuller grasp of the meanings, for boldness, for dexterity in practice, for its constant study and for success in treatment’.

Antaga (अन्तग) is the word used to signify literally one who has gone to the end of the routine courses.

Besides these ordinary post-graduates, there was a class of students who avowed to be life-long students. This class was called Naiṣṭhika Brahmachārī (नैष्ठिक ब्रह्मचारी). They were the real research scholars.

Even the post-graduate studies was not the end. Medical science being endless (अपर) and ever progressive, the physician was enjoined to keep himself ever-attentive to maintain the spirit of studentship.

निषग्वुभृषुर्मतिमानतः स्वगुणसम्पदि ।

परं प्रयत्नमातिष्ठेत् प्राणदः स्याद्यथा नृणाम् ॥

च. सु. १, १३३

“Therefore the intelligent person who is aspiring to be a good physician should always persevere to his best in the acquisition of the true qualities of a physician, so that he may be a real giver of life to people.”

ज्ञानोत्थानोपकरणसंपत्सु नित्यं यत्नवता ।

च. वि. ८, १३

“Thou shalt act always with a view to the acquisition of knowledge and the fullness of equipment”.

The art of surgery necessitated daily practice if one wanted to achieve success in the profession.

प्रयोगज्ञस्य वैद्यस्य सिद्धिर्भवति नित्यशः ।

तस्मात्परिचयं कुर्याच्छिष्याणां ग्रहणे सदा ॥

सु. सु. ९, २०

“Success always attends a physician who is expert at practice. Hence he should constantly handle the instruments to keep up his efficiency”.

Travels

Travelling was considered an essential part of education and occasions there were in plenty when travelling became an absolute necessity. They were:

- (1) For joining the universities.
- (2) Accompanying the teacher on his travels during the period of training.
- (3) For acquiring post-graduate learning or special knowledge.
- (4) For attending the medical conferences.
- (5) In the course of practice and missionary tours.
- (6) When called for consultations.

Considering the scanty means of communications of those days, when travelling to a distant place took months and it was tedious on account of the length of the period taken, when it was risky in the absence of adequate protection during the journey, and when it was full of inconveniences and lack of modern amenities, it was really creditable for those parents and royal and wealthy families who sent their children at the tender age of 16 or thereabouts for the prosecution of higher studies at places hundreds of miles away. Taxila and Benares were the two main centres of learning in those days and students from all parts of India went there to acquire higher qualifications just as the students of today go to Europe and America. It was difficult for the boys to return only at the end of the examination which took never less than 5 to 7 years. As narrated in Jātakas, parents considered themselves lucky if they could live to see their sons back home after finishing their studies. There is a vivid description of how the parents were transported with joy when their son returned home from Taxila after graduation.

The text of Caraka Saṃhitā begins with the description of Bharadwāja volunteering to travel to the abode of Indra for the acquisition of the science of life.

दीर्घं जीवितमन्विच्छन्मरद्वाज उपागमत् ।

इन्द्रमुपगतपा बुद्ध्वा शरण्यममरेश्वरम् ॥

च. सू. १, ३

“Bharadwāja, the mighty ascetic, in search of (the science of) longevity approached Indra, having deemed him, the lord of the immortals, worthy of suit.”

This shows that the student was willing to undertake the hazard of adventurous travel for the sake of knowledge.

From the Caraka Saṃhitā it is evident that the great teacher Punarvasu Ātreya was in the habit of touring in the company of his disciples, through the neighbouring regions of Pāñcāla, the woodlands of Caitraratha, Pāñcagaṅga, the environs of the home of Dhanesā, Kailāsa, the northern slopes of the Himālayas, Triviṣṭapa

etc., for the sake of healing the sick and the dissemination of the science of Āyurveda, as also for the sake of enlarging his own knowledge of the medicinal herbs and plants.

This shows that during the course of studies, the whole class—Guru and pupils, travelled in the land of the basins of the Indus and the Ganges and the area round about the Himālayan mountains.

Learned scholars attended these classes, scholars from distant places, Kaṅkāyana from Bāhlika, the modern Balkh in the north-west, Nimi Videha from the east and Vāmaka from Kāśī.

These tours greatly enhanced the practical knowledge in botany, climatology, constitutional studies of the peoples of the various countries and of clinical discussions.

After the completion of the studies, the student was enjoined to travel to give a finishing touch to his training at the university, as theoretical as well as practical knowledge was essential in the medical science.

The spirit of education has always been universal. It has never known the barriers of caste, creed or country. There is no word like "foreign" in the realm of knowledge.

This is the spirit of universality that is imbibed by the students in the university education. Āryan civilization has emphasized the importance of this spirit in clear terms. Caraka says—


कृत्स्नो हि लोको बुद्धिमनामाचार्यः शत्रुश्चाबुद्धिमताम्, अतश्चाभिसमीक्ष्य बुद्धिमताऽभिज्ञस्यापि धन्यं यशस्यमायुष्यं पौष्टिकं लौक्यमभ्युपदिशतो वचः श्रोतव्यमनुविधातव्यं चेति ॥

च. वि. ८, १४

"The entire world is the teacher to the intelligent and the foe to the unintelligent. Hence, knowing this well thou shouldst listen and act according to the words of instruction of even an unfriendly person, when they are worthy and such as bring fame to you and long life, and are capable of giving you strength and prosperity."

Caraka Saṃhitā begins with Bharadvāja going to a distant country to attain the desired knowledge. Though the Āryans may have differentiated themselves from others in other respects and in the general routine of life, as regards the domain of knowledge they honoured equally the Āryan as well as the non-Āryan, provided he possessed knowledge.

Historical records show that a number of students from middle Asia, Persia, Assyria, Greece, China, Tibet, Ceylon etc., visited India either for study or to take part in the assemblies or conferences of learned people. Similarly records are found from which we learn that Indian scholars visited Persia, Greece, Alexandria, Tibet, Burma, Siam, Java, East Indian Archipelago, Ceylon, China etc., mostly to disseminate the knowledge they had obtained or to act as missionaries of the science of physical and spiritual health. The spread of Buddhism played a great part in giving the stimulus to the learned scholars to visit various countries as missionaries. From the available Chinese records we find that more than 100 Indian scholars of medicine and philosophy visited China beginning from the 1st to the 5th century A. D. In the 5th to the 8th century A. D., Vaidyas were called to Jundishapur and Baghdad for consultations as well as for service.



MEDICAL INSTITUTIONS IN ANCIENT INDIA—PART II

CHAPTER I

THE INDIVIDUAL AND MEDICINE

The object of the science of medicine is twofold. Firstly, it is for the preservation of good health and prolongation of life, for this task demands all the diligent effort man is capable of, and secondly the combating of disease. (स्वस्थानुरपरायणम् च. सू. १, २४)

The first of these two aims may be gained by proper living, by right regulation of diet, exercise and habits all of which are possible for each individual, provided he or she possesses the necessary enlightenment and education. The second of the aims, i. e. the combating of disease, may not be possible for every individual if the complaints happen to require elaborate or deep knowledge of diagnosis and therapeutics. But where the complaints are minor and demand nothing more than a familiar and simple drug or an easy manipulation of diet or conduct, every individual or family ought to be able to manage for himself or itself without having to resort to outside help. This self-sufficiency of the individual and the family in the preservation of health and the checking of disease, is an ideal fraught with individual as well as national good. The right way to achieve this is through education at the primary and the secondary stages, for then the largest part of the nation reaps the benefits. With the attainment of this hygienic and medical self-sufficiency and independence of the individual and the family, the state gets relieved of a large part of the burden that it has otherwise to bear, and is left free to pursue with greater intensity and concentration the problems of serious and difficult forms of disease and epidemics.

This was the actual state of affairs in ancient India. There obtained a broad and universal system of education and enlightenment and elementary knowledge of medicine or personal hygiene formed part of that education in the secondary stage of it.

Secondary Education

Then the secondary education was given in high schools or Guru-Kulas where every student was bound to study compulsorily the five subjects, viz., Śabdavidyā (शब्दविद्या) or grammar and lexicography, Śilpasthānavidyā (शिल्पस्थानविद्या) or arts, Cikitsāvidyā (चिकित्साविद्या) or medicine, Hetuvidyā (हेतुविद्या) or logic and Adhyātmavidyā (अध्यात्मविद्या) or science of spiritual philosophy. On completing this course, a student was considered fit to select any special branch of study and join the University.

An elementary knowledge of medicine was considered necessary for all students. They were taught the elementary rules of preservation of health and how to live a full span of life in perfect health by taking care about diet, personal hygiene, actions and character. This shows the importance attached to the medical science, the basic knowledge of which was considered necessary for every individual. No wonder then that the medical science thus became the most popular science of the Āryan civilization.

Observation of these rules and regulation of personal hygiene was moreover preached by the religious code, as purity of heart and mind cannot be generally achieved in an unclean or unsound body. A sound mind presupposes a sound body. Hence cleanliness and preservation of sound health became the subject of religious codes and were enforced in every religious ceremony.

Dharmaśāstras are full of injunctions regarding purity, ablutions, diet, regulations, behaviour and mental and physical discipline. The daily routine and seasonal conduct known as Dinacaryā-Rtucaryā (दिनचर्या-ऋतुचर्या) as well as the general lines of hygienic life known as Swasthavytta (स्वस्थवृत्त) are given in elaborate detail in the medical treatises, and these no doubt formed part of the universal curriculum of education and ethics. The benefits of cleansing the teeth and the tongue, ear, the eye and the skin, the bath, the inunction, massage, non-suppression of the natural urges, the selection of food and drink, the occasions for avoidance and indulgence in the sexual act, the usefulness and manner of taking certain things like curds, butter-milk, honey and ghee and such other simple but very important facts that make for a healthy life were the common knowledge of all people.

Daily And Seasonal Regimen

Āyurveda is primarily the science of positive health and it is only secondarily that it is the science for the cure of disease. As such, it prescribes precepts and rules that would ensure the smooth running of the intricate mechanism of the human body without hitch or hindrance.

Thus, hygiene plays a most important role in Indian medicine. This code of health lays down in full details the regimen of daily life (दिनचर्या) in general, and its modifications and variations in different seasons (ऋतुचर्या) and the most important point emphasized is that the application of these rules is to be made according to the individual constitution (प्रकृति) of men. It comprises of instructions about diet and activity, work, rest and sleep, sense-purity, sex-hygiene and behaviour in general. Its domain covers not only strengthening the physical powers of the body, but also the strengthening and increasing the vitality of all the senses and the psyche. It contains specific injunctions and clear-cut dos and don'ts with regard to the natural urges of the body and mind. It is not the puritanic precept of abstention that it preaches; it is the full-blooded life that is aimed at, giving full scope, within healthy limits, to pleasures that the flesh can enjoy. It aims at the overcoming by man of the handicaps of nature and age. Its definition of man is complete. He is the aggregate of body, mind and spirit. Āyurveda's field of observation and application extends to all these aspects of man. Its hygiene and philosophy known as Swastha-vṛtta is supplemented by Sadvṛtta or the 'right life' which inculcates the discipline of the senses and the regulation of the moral life so as to accord with the happiness and good, not of the individual merely but of society as a whole. It is therefore social and universal in its conception and application and comprehends a physical, mental and ethical framework of life. It is an entire way of life that Āyurveda expounds embodying philosophy, eugenics, ethics and healing.

The human body is no doubt a machine but the metaphor should be applied in a limited sense only. Even as a machine it is self-stoking, self-adjusting, self-repairing, self-preserving, self-asserting and self-multiplying machine. It has intelligence and feeling. It has

individuality and purposiveness. It is an organism much beyond the concept of mechanism.

The aim of Āyurveda is to study man as a whole and as such with all the paraphernalia of social, seasonal, climatic and regional environs. It would indeed be a tedium and an ordeal for a man to go through the same daily routine for all the three hundred and sixty-five days of the year. Not only this, it would indeed adversely affect him if he followed a rigid routine in all the varying seasons. Nature has been bountiful in bestowing on India a variety of seasons. The shivering cold of the winter, the scorching heat of the summer, the welcome downpour of the monsoon, are the three chief seasonal varieties linked by the intermediate seasons of Śarad or the season of transition from the monsoon to the winter characterised by harvest festivals, placid atmosphere and clear nights; the Vasanta, or the spring, the season of flowers and colour feasts, the season of joyous youth and temperate air and thirdly the pre-monsoon season of hard toil and high expectations 'Prāvr̥ṣṭ'.

The R̥tu-caryā prescribed in Āyurveda is a code of injunctions to change or to modify the daily routine of diet and behaviour to suit the different seasons. It lays down rules of behaviour and diet to get adapted to the requirements of the varying seasons. Special emphasis is laid on the time of conjunction of two seasons when the vagaries of both the seasons co-exist, a condition to be well-guarded against. A special procedure of habituation and withdrawal of personal regimen is prescribed; for what may be conducive to health in one season may act quite contrarily in another season. Cold which is agreeable and wholesome in hot days is disagreeable and unwholesome in cold days.

The code of personal hygiene does not end here. Its most important part and purpose begins hereafter. Man is to be preserved in perfect health for the longest span of life possible for him.

Man is an intellectual, progressive creature. He is not going to be a passive, static, obedient, vegetative organism. He will transgress the limitations of diet and behaviour. As a consequence, his body-mechanism

will be too much strained, disordered or worn out. Or he may have to encounter the unusual environmental changes of time and place.

The instructions regarding the avoidance of such strain and disorder are the peculiar methods expounded by the Āyurvedic science.

(1) To give a thorough overhaul to the body-machinery as a whole by inunction (स्नेहन), sudation (स्वेदन) and quinary purificatory procedures (पञ्चकर्म).

(2) To strengthen the vital force of life to counteract the effect of wear and tear by vitalization (रसायन) and virilification (वाजीकरण).

(3) To prepare it for any emergency of unexpected circumstances of season or place which may adversely affect the body, special prophylactic measures have been advised. Here seasonal regimen plays its part in immunising the body, virilification and vitalization having already increased the body-power to fight against diseases.

The quinary purification procedures (पञ्चकर्म) cleanse the body and reduce the chances of susceptibility of the body to the onslaughts of disease. Vitalization and virilification procedures replenish the worn out tissues, preventing the approach of old age and promoting longevity. They help in the re-creation of the body, a recreation in its literal sense. The desire to live long and that too with the perfect functioning of sense-organs is inborn in human beings and Āyurveda has amply catered to this need. It has enabled people to achieve the best possible results from life.

देशानामाशयानां च विपरीतगुणं गुणैः ।
सात्म्यमिच्छन्ति सात्म्यज्ञाश्चेष्टितं चाद्यमेव च ॥

च. सू. ६-५०

विषमस्वस्थवृत्तानामेते रोगास्तथाऽपरे ।
जायन्तेऽनातुरस्वस्मात् स्वस्थवृत्तपरो भवेत् ॥

माधवप्रथमे मासि नमस्यप्रथमे पुनः ।
सहस्रप्रथमे चैव द्वारयेद्दीर्घसंनयम् ॥

स्निग्धस्विन्नशरीराणामूर्ध्वं चाधश्च नित्यशः ।

वसिकर्म ततः क्लृप्तचित्तकर्म च बुद्धिमान् ॥

यथाक्रमं यथायोग्यमत ऊर्ध्वं प्रयोजयेत् ।
रसायनानि सिद्धानि वृष्ययोगांश्च कालवित् ॥

रोगस्तथा न जायन्ते प्रकृतिस्थेषु धातुषु ।
धातवश्चाभिवर्धन्ते जरामान्द्यमुपैति च ॥

विधिरेष विकाराणामनुत्पत्तौ निदर्शितः ।
निजानामितरेषां तु पृथगेवोपदेक्ष्यते ॥

च. सू. ७, ४५-५०

स्वस्थवृत्तं यथोद्दिष्टं यः सम्यगनुतिष्ठति ।
स समाः शतमव्याधिरायुषा न वियुज्यते ॥

च. सू. ८, ३१

“The knowers of the principles of homologation consider it desirable to acquire homologation regarding food and behaviour to things which are antagonistic to the characteristics of the country and the causative factors of the diseases prevalent there”.

“These and other diseases occur in those who do not observe the rules of healthful living. Hence the healthy man should be diligent in the observance of the rules of healthful living. One should eliminate the accumulated morbid matter in the months of Caitra, Śrāvaṇa and Mārgaśīrṣa.

The wise physician should, after preliminary preparation of the body with the oleation and sudation procedures, carry out the purificatory procedures of vomition, purgation, enemata and errhines according to the season.

Thereafter the physician skilled in the science of climatology should administer alterative and virilific remedies of tested efficacy systematically and as indicated.

Thus the body-elements being restored to the normal state, susceptibility to disease disappears, the body-elements get aggrandised and the pace of age is slackened.

Such is the procedure laid down for the prevention of the

endogenous diseases. As regards the prevention of other types of diseases, we shall instruct separately”.

“He who rightly observes the rules of health laid down here will not be deprived of the full measure of the hundred years of diseaseless life.”

This knowledge of seasonal regimen was even more important for the women to learn for they thus knew how to protect the husband and the children from the evils of unwholesome dietary.

भोजने च रुचितमिदमस्मै द्वेष्ट्यमिदं पथ्यमिदमपथ्यमिदमिति च विन्यात् ॥

वा. का. अवि ४ अ. १, १०

रुचितमिदममुष्मै पथ्यमेतन्न वेति ।

प्रतिदिनमपि भर्तुर्भोजनेच्छां विदध्यात् ॥

कोकानी

“(The woman) should know that such and such a thing is delectable to the man or detestable or is wholesome or unwholesome to him in diet”.

“She must know and give to her husband articles which are liked by him and are wholesome to him. She must know articles to be such or otherwise”.

Besides this general knowledge, every house-wife took care to keep a storage of the common but useful drugs.

तथा लवणस्नेहयोश्च गन्धद्रव्यकटुकभाण्डौषधानां च दुर्लभानां भवनेषु प्रच्छन्नं निधानम् ॥

वा. का. अवि. ४ अ. १. २८

“Thus rare drugs and salt, oil, fragrant drugs and pungent drugs, and pot-herbs, should be preserved in the house”.

निम्नतमसुलभानि स्थापयेद् मेघजानि ।

कोकानी

“Drugs difficult to obtain must be collected and stored.”

मूलकालुकपालङ्कीदमनकाम्रतकैर्वाहकत्रपुष्यवार्ताककूष्माण्डालबुसूरणशुकनासास्वयंयुप्ततिलपणिकाभि-
मन्थलशुनपलाण्डुपशृतीनां सर्वौषधीनां च बीजग्रहणं काले वापश्च ॥

वा. का. अधि ४ अ. १. २९

"Radish, peach, spinach, Damanaka, Indian hog-plum, phut cucumber, common cucumber, brinjal, ash-gourd, bottle-gourd, telinga potato, lin, cowage, sambo, wind-killer, garlic and onion etc., the seeds of these and such other medicinal plants should be collected and sown in their proper season."

In the back yards of houses, the family grew a small garden of medicinal plants along with pot-herbs.

परिपूतेषु च हरितशाकवप्राणिष्ठुस्तम्बाञ्जीरकसर्षपाजमोदशतपुष्पातमालगुल्मांश्च कारयेत् ॥

वात्सायन. अधि ४-अ- १, ६

"The following herbs were to be grown in the backyards of houses, viz., plots of greens and vegetables, clusters of sugarcane, cumin, mustard and bishop's weed and dill seed plants and Tamāla shrubs."

And each family was able to prepare for its own exigencies, tinctures, medicated wines, decoctions and linctuses.

कुटुम्बिनः कृत्येषु श्वेतसुरामौषधार्थं वारिष्टमन्यद्वा कर्तुं लभेरन् ।

कौ. अ. २, २५

"On special occasions (marriage etc.) people (families) shall be allowed to manufacture white liquor or medicated wine for use in diseases and other kinds of liquor."


Round about a village and along the road-sides were planted trees and plants and shrubs that were of great medicinal value. This is borne out by an inscription of Asoka, the great Buddhist Emperor of India. The State allowed the people to pluck the leaves and fruits and bark of these trees for medicinal purposes. It is a familiar thing even today in the villages for an old dame of a household to go out into the outskirts of the village in the morning, for culling some herbs, leaves and bark for the ailment of the children, men

and women of the family. Ordinary cold, cough, constipation, diarrhea, indigestion, jaundice and a host of such minor maladies are within the compass of a family-possibilities of cure, without resorting to regular professional aid.

It was the aim to disseminate this elementary and general knowledge of personal and social hygiene as well as general principles of diet, and medicine which were within the scope of intelligence and attainment of every individual and family.

Just as certain degree of acquaintance with geography, science, history and arithmetic is deemed an essential part of a civilized man's mental equipment, even so or even more so was it deemed necessary for him to learn the general principles of hygiene, and the functioning of his own stomach, heart and lungs, and intestines which is physiology, and easy and simple methods of curing cuts, wounds and boils, ordinary fever, cold, headache and such other everyday ailments. This was not only of great individual advantage like a stitch in time which saves nine in the form of doctor's bills or irreparable damage to his health, but it reduced the medical burden of the state. This was a national blessing and created a society approaching near to the ideal.

This relationship between the individual and medicine is therefore a vital one both from the individual's own point of view as well as the state's. The state has the power to impart and the individual the capacity and inclination to learn this essential enlightenment. This requires a recasting of the educational programme of the State. It is easy to do and the results are certain to follow. The individuals are the state in our days of democracy, and a democratic programme of education cannot afford to ignore this beneficent and in the long run beneficial course of medical enlightenment of every individual member of the State.



CHAPTER II

VILLAGE AND MEDICINE

If in spite of the various onslaughts of foreign invasions and religions India has survived, it is only due to her thousands of villages humming with agricultural toil and life. The description of ancient historians furnishes the data from which we can gather that administration was so organised that every village was self-sufficing and became an independent unit in itself, at the same time being a component part of the vast area of the motherland and marching in harmony with the rest. This peaceful living and healthy development of the villages was due to the conventions of war prevalent then. As for example Kautilya warns and says:

प्रसारवीवच्छेदान्मुष्टिप्रस्यवधादपि ।

वमनात् गूढघाताच्च जायते प्रकृतिक्षयः ॥

कौ. अ. १३, ४

“ By the destruction of trade, agricultural produce and standing crops, by causing the people to run away and by slaying their leaders in secret, the country will be denuded of its peoples.”

In the same way Megasthenes also says: “ Whereas among other nations it is usual, in the contests of war, to ravage the soil, and thus to reduce it to an uncultivated waste, among the Indians, on the contrary, by whom husbandmen are regarded as a class that is sacred and inviolable, the tillers of the soil, even when battle is raging in their neighbourhood, are undisturbed by any sense of danger, for the combatants on either side in waging the conflict make carnage of each other, but allow those engaged in husbandry to remain quite unmolested. Besides, they neither ravage an enemy's land with fire, nor cut down its trees”.

This being the case the problem of medical aid was so tackled that every village was able to receive the services of the physician, in health as well as in disease. One wonders to find how simple, practical, economical and thorough a system of medical administration was devised then.

Kautilya in his Arthasāstra defines a village as consisting of

100 families or houses in the least raising the number to 500 in the highest.

शुद्धकर्षकप्राप्तं कुलशतावरं पञ्चशतकुलपरं ग्रामं कोशद्विक्रोशसीमानमन्योऽन्यारक्षं निवेशयेत् ।

As to the requirements for happy living in a village, definite instructions and advice have been laid down by the ancients. Vāgbhaṭa in his Aṣṭāṅgasāṅgraha says that:—

न देशं व्याधिबहुलं नावैद्यं नाप्यनायकम् ।

नाधर्मीजनभूयिष्ठं नोपलुष्टं च पर्वतम् ॥ १११ ॥

वसेत्प्राज्याम्बुमैषज्यसमिष्टपुष्पतृणेन्धने ।

सुभिक्षक्षेमरम्यान्ते पण्डितैर्मण्डिते पुरे ॥ ११२ ॥

अ. सं. सू. ३

“ A village should not be constructed where the country abounds in disease, where there is no physician, where there is no leader to guide and protect, where the number of irreligious people is great, and where the country is situated near a mountain. ” He says that, “People should reside in a place which bears plenty of water, medicinal herbs, sacrificial sticks, flowers, grass and firewood, and which yields abundant food, where there is complete safety of property and person, where the out-skirts are beautiful and pleasing and lastly which is adorned by the presence of learned people”.

Similarly it has been ordained by Manu that:

नाधार्मिके वसेद्ग्रामे न व्याधिबहुले सृशम् ।

नैकः प्रपद्येताव्धानं न चिरं पर्वते वसेत् ॥

म. स्मृ. अ. ४, ६०

“One should neither live among impious persons nor in a place abounding in diseases; one should not undertake journey alone nor should reside on mountain for a long time”.

There is also a popular verse which describes requisites for habitation, viz.,

अनिकः श्रोत्रियो राजा नदी वैद्यस्तु पञ्चमः ।

पञ्च यत्र न विद्यन्ते न तत्र दिवसं वसेत् ॥

“A wealthy person, a Brāhamana well versed in the Vedas, a king, a river and the fifth a physician; in a place without any of

these, one should not live even for a day."

From the above facts we can clearly see that in the construction and inhabitation of a village a site free from disease, a clever physician and the presence of medicinal herbs played an important part.

As seen above, the physician occupied a predominant place and played an important part in the happy life of a village. For his contentment and continuity of service in the interests of the people, he was endowed with lands in that village, as a part of his remuneration. Kautilya says:-

अध्यक्षसंख्यायकादिभ्यो गोपस्थानीकानीकस्थचिकित्सकाश्च दमकजङ्घारिभ्यश्च विक्रयावानवर्जम् ।

"Superintendents, accountants, Gopas, Sthānikas, veterinary surgeons, physicians, horse-trainers and messengers shall also be endowed with lands, which they shall have no right to alienate by sale or mortgage."

Thus being stabilized in the village, the physician discharged his duties in the best interests of the village.

1. He looked after every villager in health as well as in disease.
2. He was responsible for the sanitation of the whole village.
3. He imparted general training in personal hygiene and village sanitation.
4. He made use of all the medicinal plants available in his village and prepared drugs himself, thus contributing to the medical economy providing medicines at the lowest cost.
5. He helped the State in the plantation of herbs which were not grown in his village and which were often needed in the preparation of the various drugs.
6. The superintendent of agriculture sought his advice in the plantation of medicinal herbs.

सीताध्यक्षः कृषितन्त्रग्रन्थमृक्षायुर्वेदज्ञस्तज्ज्ञस्यो वा ।

सी. अ. ४. ११५

"The superintendent of agriculture shall be possessed of the knowledge of the science of agriculture dealing with the plantation of bushes and trees, or assisted by those who are trained in such sciences".

Thus he brought about the well-being of the people as a physician, a sanitary officer, a pandit and a wise man.

The state not only maintained such village physicians but provided veterinary physicians also for the treatment of animals because animals are everything in the agricultural life of a village.

दण्डविष्टिकराबाधैः रक्षेदुपहतां कृषिम् ।

स्तेनव्यालविषमार्दैः व्याधिभिश्च पशुव्रजान् ॥

कौ. अ. पृ. ४८

"He shall protect agriculture from the molestation of oppressive fines, free labour and taxes; herds of cattle from thieves, tigers, poisonous creatures and cattle disease."

There existed a class of travelling physicians who visited small villages and hamlets going from one place to another, dispensing medical aid, and preaching medicine and religion as well. This class is still existant in India. It resembles the *Periodeuteis* i. e. travelling physicians or ambulant physicians of ancient Greece. Moreover there were hospitals wherein the diseased, the aged and the helpless were treated free of cost. The maternity homes for women and children were also maintained by the state.

बालवृद्धव्याधितव्यसन्यनाथांश्च राजा विन्यस्य । स्त्रियमप्रजातां प्रजातायाश्च पुत्रान् ।

कौ. अ. पृ. ४७

"The king shall provide the orphans, the aged, the infirm, the afflicted and the helpless with maintenance. He shall also provide subsistence to helpless women when they are carrying and also to the children they give birth to."

The state also took measures to prevent the spread of epidemics or when necessary arranged the evacuation of the villages if the epidemics were not controlled.

परचक्राटवीप्रस्तं व्याधिदुर्मिक्षपीडितम् ।
देशं परिहरेद्राजा व्ययक्रीडाश्च वारयेत् ॥

कौ. अ. पृ. ४८

" The king shall avoid taking possession of any country which is liable to the inroads of enemies and wild tribes, and which is harassed by frequent visitations of famine and pestilence. He shall also keep away from expensive sports. "

All the measures intended for the welfare of the public contributed greatly to the physical progress and thereby to the mental and moral progress of the society as well and thus helped in the nation-building effort of the times.

Just as medical aid was rendered in the right manner, so too there was great vigilance shown against prevalence of quacks and pretenders who robbed the people of their lives and money. Stern measures were taken by the enactment of special laws forbidding these charlatans to practise and cheat the innocent people.

Medicinal plants were planted either in natural soil or in pots.

गन्धमैषज्योशोरहोत्रेरपिण्डाष्टकादीनां यथास्वं भूमिषु च स्थाल्याश्च अनूपाश्चौषधीस्तथापयेत् ।

कौ. अ. २, २४

" Such medicinal herbs as grow in marshy grounds are to be grown not only in grounds suitable for them, but also in pots. "

The following edict of king Aśoka bears testimony to the above statement—

- B. ओषुडानि च यानि मनुष्योपगानि च पक्षोपगानि च यत यत नास्ति सर्वत्रा हारापितानि च रोपापितानि च
- C. मूलानि च फलानि च यत यत्र नास्ति सर्वत्र हारापितानि च रोपापितानि च
- D. पथेषु कूपा च खानापिता ऋक्षा च पारेपिता परिभोगाय पशुमनुमानं

(b) "And wherever there were no herbs that are beneficial to man and beneficial to cattle, everywhere they were caused to be imported and to be planted."

- (c) "Wherever there were no roots and fruits, everywhere they were caused to be imported and to be planted."
- (d) "On the roads, wells were caused to be dug and trees were caused to be planted for the use of cattle and men".

In the same way those who injured the trees, useful plants and herbs were also made liable to punishment.

कृष्टजानामोषधीनां जातानां च स्वयं वने ।
वृथालम्भेऽनुगच्छेद्वा दिनमेकं पयोव्रतः ॥

म. स्मृ. ११, १४४

" One who uselessly cuts medicinal herbs planted in cultivated soil or grown wildy, should, in order to absolve himself of the sin, follow a cow and subsist on milk alone for one day."

There were strict rules regarding the notification of disease which the village Vaidya was bound to report, to the head of the village, every serious case or notifiable disease.

चिकित्सकः प्रच्छन्नव्रणप्रतीकारकारयितारमपथ्यकारिणं च गृहस्वामी च निवेद्य गोपस्था निवेद्य ।
गोपस्थानिकयोर्मुक्तयेतान्यथा तुल्यदोषरस्यात्

कौ. अ. अ. २, ३६

" Any physician who undertakes to treat in secret a patient suffering from ulcer or excess of unwholesome food or drink, as well as the master of the house (wherein such treatment is attempted) shall be innocent only when they (the physician and the master of the house) make a report of the same to either Gopa or Sthānika; otherwise both of them shall be equally guilty with the sufferer."

Now taking the benefit of the age-old tested experience, we in modern times, should organise medical aid, on the lines already suggested making changes whenever and in whatever way necessary and as suited to the needs and conditions of modern society. As for example:

1. The Vaidya should be stabilised by being given a plot of land in the village.

2. Protection and plantation of medicinal herbs around the village should receive all attention from the State.
 3. Simple drugs should be prepared by the Vaidya himself in order to ensure the efficacy, freshness and low cost of the preparation.
 4. Every village must have its hospital on a small scale where the diseased, the aged and the helpless might receive careful treatment.
 5. Widows and helpless women may be trained as nurses and midwives, who can earn their living and at the same time help the people in their illness.
 6. Maternity homes should be provided for the gravida and the children so that they have immediate medical aid without any change of place and without much expense.
 7. Prohibition of practice should be enforced on quacks and pretenders, by means of heavy punishments.
-

CHAPTER III

URBAN MEDICAL RELIEF

India then, as now, was a land of villages. The vast bulk of the people have always lived in the country. The great changes in rulership, the palace revolutions and foreign domination have left the rural life of our country almost untouched. Every village has had its extent of land for tillage and pasturage, its temple for worship, its own priest and vaidya, its barber and dhobi all institutionalised on a lasting basis. Everything goes on today as it has gone on through the length of the ages.

The changes are in the town modes of life and all political and social upheavals have their source and their end in the life of the urban population. Every dynasty of kings took care to meet the changing needs of the urban life and so important an aspect as health and medical aid could not have been neglected.

Two Types of Institutions

1. State Service.
2. Private practice.

For this purpose two classes of medical practitioners came into existence. One class belonged to the state service and rendered medical help according to the rules and regulations of the State and with its authority too. The other class consisted of private practitioners who tried their best to help the people in a humanitarian spirit.

For the institutions of state service the following references from Kauṭilya will shed much enlightenment on the subject.

Kauṭilya mentions the exact site where the state dispensary is to be established.

उत्तरपश्चिमं भागं पण्यभैषज्यगृहम् ।

कौ. अ. पु. ५५

“To the north-west should lie shops and hospitals”.

He also states where the shrine dedicated to the Aświnīs along with that of other gods should be built.

आपराजिताप्रतिहतजयन्तवैजयन्तकोष्ठकान् शिववैश्रवणाश्विमीमदिरागृहं च पुरमध्ये कारयेत् ।

कौ. अ. पु. ५५

“In the centre of the city, the apartments of gods, such as Aparajita, Apratihata, Jayanta, Vaijayanta, Śiva, Vaiśravaṇā, Aświnas and the abode of Goddess Madirā shall be situated.”

Also he mentions that a store of medicines adequate for the requirements of many years should be secured, and old stocks should be replenished by fresh ones.

भैषज्य..... निचयानलेकवर्षोपयोग्यद्वान् कारयेत् ।..... नवेनाननं शोधयेत् ।

कौ. अ.

“Medicinal articles...shall also be stored in such quantities as can be used for years together without feeling any want.”

"Of such collection, old things shall be replaced by new ones when received."

In addition to the medical officers appointed by the State, there existed a larger class of physicians who did private practice.

That the medical profession was a popular one drawing a larger number of people to the trade is evident in as ancient a time as that of the Rāmāyaṇa where we find it said that all the people of the town viz.,

दन्तकाराः सुधाकारा ये च गन्धोपजीविनः ॥१३॥

सुवर्णकाराः प्रख्यातास्तथा कम्बलकारिकाः ।

स्नापकोष्णोदका वेद्या धूपकाः शौण्डिकास्तथा ॥१४॥

रा. अ. का. ८३

"Grocers, jewellers, makers of rugs, keepers of hot water baths, medical practitioners, fumigators and wine sellers, all of whom accompanied Bharata to meet Rāma."

The medical practitioners seem to have formed their own guilds just as other merchants, artisans and craftsmen did.

The medical profession must have been a lucrative one in those days so much so that it induced a lot of ambitious persons to parade as physicians and exploit the people. As we shall see the quacks abounded in every place and were known for their presumptuous manner and speech.

Three kinds of practitioners were existant at that period as depicted by Caraka:

मिषकञ्चनचराः सन्ति सन्त्येके सिद्धसाधिताः ।

सन्ति वैद्यगुणैर्युक्तास्त्रिविधा मिषजो भुवि ॥५०॥

वैद्यभाण्डैषधैः पुस्तैः पल्लवैरवलोकनैः ।

लभन्ते ये मिषकश्चन्दमज्ञास्ते प्रतिरूपकाः ॥५१॥

श्रीयज्ञोज्ञानसिद्धानां व्यपदेशदत्तद्विधाः ।

वैद्यशब्दं लभन्ते ये ज्ञेयस्ते सिद्धसाधिताः ॥५२॥

"Three kinds of medical practitioners are found in the world; firstly, the impostors in physician's robes; secondly, the vain-glorious pretenders, and thirdly, those endowed with the true virtue of the healer.

Those who by parading their medical paraphernalia, books, models, smattering of medical texts and knowing looks acquire the title of physician, are the first kind, viz., the ignoramuses and impostors.

Those who by laying claim to association with persons of established wealth, fame, knowledge and success, while they themselves have none of these things, arrogate to themselves the designation of physicians, are vain-glorious pretenders."

This shows the equipment a physician was having in his dispensary and the art he was making use of in his practice.

Vātsāyana makes interesting references to the dispensaries in the town that were the convenient trysting places for lovers.

तस्याः प्रायतिष्ठं दर्शनं मित्रज्ञातिमहामात्रवैद्यभवनसंनिधौ विवाह्यज्ञोत्सवव्यसनोद्योग-
गमनादिषु ॥ ६ ॥

५,२

"In the neighbourhood of the building of a friend, caste-fellow, high official or of a physician and on the occasions of marriage, sacrifice, festival, adversity and visit to the gardens etc., a woman tried to make her appearance."

The equipment of the practitioner was as complete as the needs of the times demanded. Caraka ascribed great importance to the completeness of equipment of a physician, for without it, successful treatment is not possible to achieve.

Before a physician takes up a patient for treatment, he is advised to keep ready all medication, apparatuses and instruments required for the procedure of treatment as well as for the emergency that may arise during the course of treatment.

इह खलु राजानं राजमावसन्थं वा क्षिपुलद्रव्यं वसनं विरेचनं वा पाययितुं कामेन मिषजं प्रागेवौषधपात्रात् संभारा उपकल्पनीया भवन्ति, सस्यकचैश्च हि गच्छत्यौषधे प्रतिभोगार्थाः, व्यापके चोषधे व्यापदः

परिसंख्याय प्रतिकारार्थीः, न हि सन्निकृष्टे काले प्रादुर्भूतायां मापदि सत्यपि कयाकथे लुकरमांशु संभरणमौषधानां यथावदिति ।

च. सू. १५, ३

"The physician who wishes to administer the procedure of emesis or purgation to a person of kingly circumstance or a wealthy man, must keep ready before beginning his treatment, his full armamentarium. If the procedure proves quite successful, the equipment will be of use in after-treatment, and if the procedure goes wrong it will serve to help diagnosis and emergency treatment of complications arising during the course of treatment. The equipment should be kept because it is not easy to obtain immediately, even if the means to buy them be available, the stock of remedies needed in the event of an emergency development of the disease."

Thus we see that even in that bygone age the medical profession was a popular one in the cities and towns and the best minds must have striven for high achievement in the profession and science. It is therefore that one should regard Āyurveda not as a mere dead letter come down to us only through mute books, but is a living and expanding art and science which dominated for thousands of years, but which has suffered neglect only for a few centuries recently. It is for the citizens of free India to pick up the thread and continue to progress into newer realms of achievement and glory and to place it before the world in such a form as it may be of universal use and utility.

CHAPTER IV

THE ROYAL PHYSICIAN

It was natural that in a society patterned on the monarchical system of government, all the arts and sciences should centre round the person of the king and his patronage be the means and object of all advancement in them. The poet, the artist, the scholar, the astrologer, the priest, the physician and the statesman were each of them attached to the king's person and humored and helped him in his pleasures and pursuits and enriched his mental and physical

equipment while they in turn received his admiration and encouragement and not seldom lavish patronage.

Nizami-i-Arudi, a court poet of Samarkand in his persian book Chahar Maqala has well said that the four classes of experts are indispensable in a properly constituted court, to wit secretaries of State, poet, astrologer and physician. While the poet and the others might be dispensed with, the physician and the statesman were indispensable for obvious reasons; that is maintaining order in the constitution of king's body and the constitution of the Government respectively. Out of these two again the physician was of the greater importance to the king as the health, the basis of all happiness and activity can only be secured by the services of an able and trustworthy physician. Moreover, the king lived in perpetual fear of being poisoned, and his luxurious life made continual inroads on his health. He had therefore great need to entrust his everyday life to the regulation and supervision of the physician. The two aspects of medicine, namely the maintenance of health and long life as well as the combating of disease, found complete application, in the supervision of a king's life by a physician.

The post of Royal physician needed trustworthiness equally with the ability and hence the system of hereditary appointment might be prevalent as in the appointment of ministers. We find in Harṣacarita (हर्षचरित)—

तेषां तु भिषजां मध्ये पौनर्वसवो....तस्मिन्नेव राजकुले कुलकमागतो...रसायनो नाम वैद्यकुमारकः ।

ह. च. उ. ५. ११.

“Amongst those physicians, a boy physician named Rasāyana, the descendant of Punarvasu, held his hereditary office in that royal family.”

The royal physician had to reside in the palace compound and be ever vigilant as he had to supervise every detail of the king's daily life. In the words of Vāgbhaṭa

राजा राजगृहासन्ने प्राणाचार्यं निवेद्येत् ।
सर्वदा स भवत्येवं सर्वत्र प्रतिजायुषिः ॥

अज्ञानं विषादक्षेत्रोपेण महीयते ।

योगक्षेमौ तदायसौ धर्माद्या यन्निबन्धनाः ॥

अ. ह. ७. १. २.

"A king should make the physician reside near the royal palace, so that he may be ever vigilant everywhere. He shall protect the food and drink of the king, specially from poison. Acquisition and preservation to which are fettered religious merit etc., are dependent on him."

In addition to the personal attendance on the king, he was responsible for the health of the queen and the prince. So he had free entrance to the harem.

That the physician had freedom of access even to the woman's apartments where the virgins of the royal household lived is seen from a verse in the Naiṣadhīya-carita (नैषधीयचरित) where it is said that there are only two that can enter with impunity the virgin's apartments namely the prime minister and the physician who possesses all the learning of both Caraka and Suśruta.

कन्यान्तःपुरबाधनाय यदधीकारान् दोषा नृपं

द्वौ मन्त्रिप्रवरश्च तुल्यमगदंकारश्च तावूचतुः ।

देवाकर्ण्य सुश्रुतेन चरकस्योक्तेन जानेऽखिलं

स्यादस्या नलदं विना न दलने तापस्य कोऽपि क्षमः ॥ नै. च. स. ८, ११६.

"In the same words replied to the king, both the prime minister and the physician by whose good offices the bad elements morbid humors might not disturb the inner apartments internal organs of the body of the princess. Listen, Your Majesty, I know completely by the well heard statement of the spy authority of Suśruta and Caraka that nothing except Nala Valerian is able to relieve her affliction."

He was expected to take extra care of the queen from the very day of the conception to see that the pregnancy period and intra-uterine growth of the fetus progressed satisfactorily.

आपन्नसत्त्वायां महिष्यां कौमारभृत्यो गर्भभर्माणि प्रजनने च वियतेत । कौ. अ. १. १६

“When she has conceived, the king shall observe the instruction of midwifery with regard to gestation and delivery.”

कौमारभृत्याकुशलैरनुष्ठिते भिषगिभरासैरथ गर्भभर्माणि । रघु. स. ३, १२

“Now, in due season, the development of the fetus having been effected by trustworthy physicians well-versed in the treatment of infants.” etc.

A special physician was appointed to be in charge of the prince's health, who had to stay with the prince; as Caraka says:

शुचिश्च वैद्यादुरक्तजनसंपूर्णम् च. शा. ८

“Fully accompanied by clean and aged physician and affectionate people.”

A special physician was appointed to superintend the kitchen; he was expected to possess special qualification as described in Suśruta.

कुलीनं धार्मिकं स्निग्धं सुमृत्तं संततोत्थितम् ।

अलुब्धमशर्तं भक्तं कृतज्ञं प्रियदर्शनम् ॥

कोषपारुष्यमात्सर्यमायालस्यविवर्जितम् ।

जितेन्द्रियं क्षमाबन्तं शुचिं शीलदयान्वितम् ॥

मेधाविनमसंश्रान्तमनुरक्ते द्वितैषिणम् ।

पटुं प्रगल्भं निपुणं दक्षमालस्यवर्जितम् ॥

पूर्वोक्तैश्च गुणैर्युक्तं नित्यं सज्जिहितागदम् ।

महानसे प्रयुजीत वैद्यं तद्विषयजितम् ॥

सु. क. १. ८-११

तत्राध्यक्षं नियुजीत प्रायो देवगुणान्वितम् ॥१४

इजितज्ञः वैद्यः..... १८

“The king should appoint a physician to supervise kitchen, who is of noble birth, religious-minded, affectionate, well-paid, of hereditary line, not greedy, not a rogue, devoted, grateful, of pleasing appearance, devoid of anger, roughness, envy and deceit, possessed of sense-control, fortitude, cleanliness, character, compassion, intelligence, tirelessness and love, who is a well wisher, is clever, bold, skilful and devoid of lethargy. He should possess the above mentioned qualities and should have medicines always at hand.”

"There he should appoint a superintendent who is for the most part possessed of qualities of a physician."...."The physician was skilled in the interpretation of internal sentiments by external gestures".

Thus he was skilled in the interpretations of gestures too.

He has to keep the dispensary as well as the emergency requirement (first-aid) in the palace compound. As Kauṭilya mentions:

Palace dispensary—

पुष्टतः कक्ष्याविभागे स्त्रीनिवेशो गर्भव्याधिष्वेवप्रख्यातसंस्था वृक्षोदकरथानं च ।

कौ. अ. १, २०

"On one side in the rear of the harem, there shall be made for the residence of women, compartments provided not only with all kinds of medicines useful in midwifery and diseases, but also with well-known herbs and a water reservoir."

In every building in the Royal court emergency medical aid was kept.

सर्वेषां शालाखातोदपानवच्च स्नानशुद्धाग्निविषत्राणमार्जारनकुलरक्षास्वादैवपूजनवृत्ताः कारयेत् ।

कौ. अ. २, ५

"All these buildings shall be provided with halls, pits, water-well, bath-room, remedies against fire and poison, with cats, mongooses and with necessary means to worship the guardian gods, appropriate to each."

When the physician had to perform any procedure of Pañcakarma (पञ्चकर्म) or operative work, he had to get his hospital fully equipped before-hand for the treatment as well as for any emergency which is likely to arise. The king received an aristocratic method of treatment.

Royal hospital—

इह खलु राजनं राजमात्रमर्थं वा विपुलद्रव्यं वसनं विरेचनं वा पाययितुकामेन सिषजा प्रागेवौषधपानात् संभारा उपकल्पनीया भवन्ति ।

“The physician who wishes to administer the procedure of emesis or purgation to a king or a person of kingly circumstance or a wealthy man must keep ready before beginning his treatment, his full armamentarium.”

“Only those who are kings or of kingly circumstance or men of abundant wealth can be given the purgation procedure, in this manner.”

His time of daily visit to the king was very early in the morning.

Vaidya's visiting time—

अष्टमे रात्रिभागे चिकित्सकमहानसिद्धमौहूर्तिकांश्च पश्येत् ।

कौ. अ. १,१६

“And during the eighth division of the night, he shall see his physician, chief cook and astrologer”

The physician was given preference in interviews.

Vaidya's interview—

अग्न्यगारगतः कार्यं पश्येद्द्वैषतपस्विनाम् ।

पुरोहिताचार्यसहः प्रत्युत्थायामिवाथ च ॥

कौ. अ. १,१६

“Having seated himself in the room where the sacred fire has been kept, he shall attend to the business of physicians and ascetics practising austerities, and that in company with his high priest and teacher and after preliminary salutation.”

Besides emergencies and important demands on his fund of wisdom, he had to be in constant vigilance regarding the purity of the food, drink and medicine served to the king, in which task he had to supervise both in the kitchen and at the service in the dining hall. He had first to taste the food himself and see it eaten by the cook and servants, and then let it be served to the king.

Kaṭṭilya says—

मिषमैषज्यागाराद्विशुद्धमौषधं गृहीत्वा पाचकपोषकाभ्यामात्मना च प्रतिस्वाद्य राज्ञे प्रयच्छेत् ।
पानं पानीयं चौषधेन व्याख्यातम् । कौ. अ. २१

"Having taken out from the store-room of medicines that medicine the purity of which has been proved by experiment and having himself together with the decoctioner and the purveyor tasted it, the physician shall hand over the medicines to the king. The same rule shall apply to liquor and other beverages."

He had to supervise not only his food and drink and medicine but he had to supervise his bed-chambers too.

राज्ञः शय्याभिमन्त्रणम्

विदध्यात्परतः शय्यां रक्षामन्त्राभिमन्त्रिताम् ।

"Protection of the king's bed-stead by incantations."

"The king's bed-stead should be well protected all round by muttering incantations for protection."

Thus the royal physician was expected to look after the king in every detail of his life so as to maintain perfect health and longevity. He had to manage the luxurious methods of treatment in disease befitting the royal personage, he had to look after the queen, with special care during pregnancy, delivery and puerperium, he was responsible for the health of the prince and such other needs of the king and his family. Thus he was expected to be an expert in all the branches of medical science.

All this goes to show how greatly were the medical man and profession in demand even in ancient times and particularly by the king who had regular establishment, dispensary, nurses and physician of his own. Such a royal physician was easily the prince of his profession and an acknowledged and respected leader in the realm.

It was therefore the ambition of those that took up the study and practice of medicine to be one day the king's physician or honoured by the royal personage; as Suśruta says:—

स्वयम्भुवा प्रोक्तमिदं सनातनं
 पठेद्दि यः काशिपतिप्रकाशितम् ।
 स पुण्यकर्मा भुवि पूजितो नृपै-
 रनुक्षये शकसलोकतां व्रजेत् ॥

सु. सु. १. ४१

“ He who studies this science which is expounded by the self-existent Brahmā and which is eternal and which is laid open by the Lord of Kāśī, is, being of the merit of holy deeds, worshipped by the kings on earth and goes to heaven after death. ”

But the selection of the Royal physician was based on such a high standard that only the best, wisest and ablest could hope to be chosen by the king (says Caraka). The Royal physician's responsibility was very great. In Vāgbhaṭa's words:—

राजसेवायाः कठिनत्वम्—

आसन्नसेवा नृपतेः क्रीडाशस्त्राहिपावकैः ॥ १५२ ॥

कौशलेनातिमहता विनीतैः सा निरुध्यते ।

प्राप्य दुष्प्रापमैश्वर्यं बहुमानं च भूपतेः ॥ १५३ ॥

यथोपभुङ्जीत चिरं तथा स्यादप्रमादवान् ।

॥ १५४ ॥

“ The attendance on a king is as dangerous as a sport with weapons, snakes and fire. It can only be discharged by modest persons through very great dexterity. Having acquired unattainable sway and great honour from the king, one should remain vigilant so as to retain and enjoy them for a long time. ”

Lastly this subject cannot be complete without quoting the verses of Vāgbhaṭa that describe the way in which the physician should conduct himself before his royal master; they are very interesting and betokens the wisdom of those times.

राज्ञः सन्निधे वैद्यचर्याः —

देशे काले परार्यं च वदेद्वर्मार्यसंहितम् ।

नानुशिष्यादपृच्छन्तं सहदेतद्धि साहसम् ॥
 नाचरेदहितैर्नैवं मूलच्छेदश्च हि तत् ।
 अनुकूलं हितं वाच्यमहिताद्वारेण्मिथः ॥
 उदारैः सान्त्वयन्वाक्यैर्दोषश्चेत्तदुपेक्षया ।
 तूष्णीं वा प्रतिवाक्ये स्थाद्वजयेद्द्वेष्यसंकषाम् ॥
 विपश्चिदप्यचित्तज्ञो बालिशोऽपि तु भावयित् ।
 अतिप्रियोऽपि द्वेष्योऽपि यास्याश्च निपरीतताम् ॥
 निवेश्य राज्ञे कुर्वीत कार्याणि सुलघूःपि ।
 न यायान्न चिरं तिष्ठेत्कोशस्थानावरोधयोः ॥
 स्वल्पेऽपि दर्शयेत्तुष्टिं लाभेऽनुद्धतमानसः ।
 मिथः कथनमन्येन कौलीनं द्वन्द्ववादिताम् ॥
 वस्त्रादि राज्ञा सहशं राजलीलां च वर्जयेत् ।
 दत्तं यत्तु नृपेणैव तद्धार्यं तुष्टिहेतवे ॥
 हसितव्ये स्मितं कुर्यात्प्रभोरेवानुवृत्तितः ।
 सच्यमानेऽवलम्बेत परमर्मेणि मूकताम् ॥
 स्वमर्मेणि तु बाधिर्यं धैर्यमाधुर्यसौष्ठवान् ।
 अस्यायास्त्रेन नात्मानं कुर्यादतिसमुच्छ्रितम् ॥
 पातो यथा हि दुःखाय नोच्छ्रायः सुखकृत्तथा ।

"If it is in the interest of some one else, he should see that time and place are propitious. At all times, the physicians speech should be consistent with the ends of righteousness and the king's welfare. He should not proffer counsel unless solicited, for such gratuitous advice might easily be deemed a great presumption. He should never act in a way that is prejudicial to the king's good, for, it would mean destroying his own support. The physician should see that what he says is palatable as well as wholesome. If he wishes to advise the king against an evil course, he should do so in strict privacy and in words that are noble and dignified. But even this he should do only when indifference on his part would be blameworthy. If such advice is met with a rebuff, the physician should hold his peace. Conversation that is distasteful to the king should not be persisted in. As between a man who is learned but a poor psychologist, and a man who is unlettered but

is good at reading people's minds, the former, even if he is in high favour, will soon slip into extreme disfavour and the latter from even extreme disfavour will rise into high favour.

It is only after acquainting the king that any measures, however slight, should be undertaken. As regards the treasury and the royal harem the physician's visits to the places should never be uncalled for and when they take place, they should be as brief as possible.

He should show great satisfaction even at the bestowal of small rewards never betraying a haughty frame of mind.

While at court, he should avoid confidential conversations with any other than the king himself; he should also eschew gossip-mongering, hostile disputation, imitating the king either in his sartorial habits or in his pleasures and recreations. But if the king himself has bestowed anything as a mark of favour it should be worn for enhancing the royal pleasure; and while careful in being attentive before his royal master at all times, the physician should allow himself only a smile when the occasion demands loud laughter.

When a secret relating to some one else is being narrated, the physician should seem as though he were dumb, when a secret concerning himself is being divulged, he should put on the quadruple armour of deafness, fortitude, sweetness and perfect ease of manner.

He should not take excessive pains with the object of putting himself in a too highly exalted position; for it will be found that the joy of soaring high cannot compensate for the pain of the fall when it comes.'

Though closely associated with the royal person, the physician is not to strain that intimacy in any way nor press it to selfish advantage, for it is said that too great a liking or even dislike for a person from the king is fraught with danger. The physician should do nothing without having first apprised the king of it and taking his leave. He must show satisfaction with whatever he receives

from the king as remuneration He should not speak lies nor back-bite against others. He must be modest and not imitate the king in dress or manners. Where he might laugh he should only smile and thus conduct himself with great restraint. This is the way by which he may avoid coming to grief and remain happy and secure.

Being such a royal physician, we may admit, demanded all the wisdom, caution and ability that the best of men are capable of.

CHAPTER V

MILITARY SURGERY

That the general art of surgery owes its origin and development to military surgery is popular knowledge. The Indian name for it is Śalya-Śāstra (शल्यशास्त्र) meaning the extraction of the spear-head or arrow-head.

The word Dhanvantari (धन्वन्तरि), God of surgery, has the same significant derivation (धनुः शल्यशस्त्रं, तस्य अन्तं पारं, इत्यति गच्छतीति). The practitioners of the school of surgery are called Dhānvantariyas (धान्वन्तरीयाः)

तत्र धान्वन्तरीयाणामधिकारः क्रियाविधौ ।

वैद्यानां कृतयोग्यानां व्यवशोधनरोपणे ॥ ४४ ॥ च. चि. ५, ४४

“Here begins the province of the surgeons; as regards its treatment, it is of such surgeons as have practical experience in the art of aspiration, purification and healing of abscesses.”

Thus its military origin is evident in the very name of the art. The Āryans of ancient India were a heroic people given to the joy of war and military conquest. Their history and mythology is full of the echoes of battles and military victories over either the barbarian hordes of foreigners or aboriginals or the armies of rival tribes and neighbouring kings.

War was so common that military science had become one important branch of university education. Not only is there mention in the Vedas about persons approaching expert Gurus to learn this branch of knowledge, but even in later times we find Taxila having 103 princes at a time as students in its military school.

Under these circumstances, it is nothing strange that at quite an early time in her history, India developed the great art of surgery. The palaces of all ancient kings were hot-beds of intrigues and conspiracies of potential rivals to the throne. Hence the fear of his food and drink being secretly poisoned was very great with every king. He therefore had a physician and surgeon all the time by his side in order to give himself the fullest protection from poison and disease. These duties became all the more important during war period. The *Suśruta Samhitā*, the great treatise on surgery and medicine, devotes an entire chapter to this military surgery by name *Yuktaseniya* (युक्तसेनीय).

Suśruta describes the duties of the military surgeon as under:—

नृपतेर्युक्तेनस्य परानभिजिगीषतः ।
 भिषजा रक्षणं कार्यं यथा तदुपदेक्ष्यते ॥
 पन्थानमुदकं छायां भर्तुं यवप्रमिन्धनम् ।
 दूषयन्त्परयस्तच्च जानीयान्छोधयेत्तथा ॥
 दोषागन्तुजमृत्युभ्यो रसमन्त्रविशारदौ ।
 रक्षेतां नृपतिं नित्यं यत्तौ वैद्यपुरोहितौ ॥ सु. सु. अ. ३४, ३, ५, ७.

“Here it is specified how a king should be protected by a physician when he is accompanied by the army and when he is intent upon vanquishing his enemies.

The enemies defile the road, the water, the shade, the food, the corn and the fuel. The physician should find that out and purify them.

The physician and the family priest both expert in toxicology and thaumaturgy should always diligently protect the king from the endogenous and exogenous diseases as well as from death.”

Thus the physician is warned to be on his guard against the king's food, drink, path etc. being poisoned by the enemies and to purify these things from such contamination. He, along with the priest, was to protect the person of the king from the dangers of disease, injury, poison and evil charms.

The author further describes where the physician's residence should be situated, what equipment he should have, what conditions he has to treat and how his abode can be distinguished. The organisation headed by the physician pitched its own separate tents near the royal tent and flew a special flag overhead to distinguish it.

स्कन्धावारे च महति राजगेहादनन्तरम् ।
भवेत्सन्निहितो वैद्यः सर्वोपकरणान्वितः ॥

तत्रस्थमेनं ध्वजवद्यगःख्यातिसमुच्छ्रितम् ।
उपसर्पन्त्यमोहेन विषशल्यामयार्दिताः ॥

स्वतन्त्रकुशलोऽन्येषु शास्त्रार्थेष्ववहितः ।
वैद्यो ध्वज इवाभाति नृपतद्विद्यपूजितः ॥

सु. सू. अ. ३४, १२-१४

“ In a big encampment just after the tent of the king, the physician should be kept present, fully equipped.

The persons afflicted with poison, darts and disease approach him there without making a mistake—him who stays there being singled out by his flag, fame and name.

The physician who is an adept in his own art and is conversant with other sciences, being honoured by the king and experts, looks prominent like a flag. ”

Kaṭilya also refers to the duties of the military surgeon that has to treat and protect the infantry, horses and elephants from diseases, epidemics, food, troubles etc.

व्याधिमरकदुर्भिक्षपीडितं व्याधितपरश्वद्विपम् भूयिष्ठं वा बलव्यसनेषु वा स्वैवेन्यं रक्षेत् ।

कौ. १०, २

“ He should protect his army when it is suffering from a disease, pestilence or famine; when a great portion of its infantry, cavalry and elephants is diseased, when it is not sufficiently strong, or when it is in distress. ”

He further describes how the king and his battling men must be enthused and supported and given first aid treatment from behind by surgeons equipped with instruments, apparatuses, antidotes, ointments and cloth and by women taking proper care in the service of food and drink.

विकित्सकाः शस्त्रयन्त्रागदस्नेहवस्त्रहस्ताः क्षियश्चान्नपानरक्षिण्यः पुरुषाणामुद्धर्षणीयाः पृष्ठतस्तिष्ठेयुः ।

कौ. १०, ३

“ Physicians with surgical instruments, machines, remedial oils and cloth in their hands, and women with prepared food and beverage should stand behind, uttering encouraging words to fighting men. ”

In addition to this he was expected to know the art of -

1. How to kill hunger.
2. How to increase the power of marching.
3. How to increase the power of eye sight.
4. How to disseminate various diseases in the enemy's camp.
5. How to poison air, water and trees.

The detailed description of these and many other fair and foul means used in war is given in Kautilya. The physician was also made use of as a spy.

Kautilya ascribes still more devilish duties to the doctor than these. He was a creator of disease in the opposite army and curer of his own army—a devilish and divine personality combined.

एतैः कृत्वा प्रतीकारं स्वसैन्यानामथात्मनः ।

अग्नित्रेषु प्रयुजीत विषधूमाम्बुदूषणान् ॥

कौ. १४, ४

“ Having applied these remedies to secure the safety of himself and his army, a king should make use of poisonous smokes and other mixtures to vitiate water against his enemy. ”

The Mahābhārata, the greatest epic and war poem of the world, is full of references to the duties, work, the skill and greatness of the surgeons that attended on kings and armies. It describes in detail the various preparations to be made and precautions to be taken during the war time. Rāmāyaṇa is also a rich store of references on this subject. This is an unexplored field of research on the subject of war-injuries, medical organisation and ethics in war.

अर्थनिचयं कुर्वाद्वाजं परवर्त्तितः ।

तेन वसा मधुघृतमौषधानि च स्वराः ॥ ५६ ॥

औषधानि च सर्वाणि मूलानि च फलानि च ।

चतुर्विधांश्च वैद्यान्वै स गृहीयाद्विशेषतः ॥ ५९ ॥

टीका—चतुर्विधान्—विषशल्यरोगहृत्त्याहरान् म. शान्ति. अ. भा. ६९

“A king when afflicted by the army of an enemy, should store up articles, viz., oil, fat, honey, ghee and medicines.

He should specially gather all medicines, roots, and the four kinds of healers viz, toxicologist, surgeon, physician and thaumaturgist.”

Rāmāyaṇa references:—

तानि मूलानि दिव्यानि फलानि च फलाशनाः । Who stays

औषधानि च दिव्यानि जगदुर्ध्वरिपुंगवाः ॥ ३१ ॥

ते गृहीत्वौषधीः सर्वाः फलं मूलं च वानराः । his own a

तं प्रतिग्राहयामासुर्वचनं चेदमब्रुवन् ॥ ३५ ॥ by the k

वा. रा. कि. ३.

सर्वौषधीभिर्गन्धैश्च समालभ्य महाबलाः ।

military surge

निर्जग्मुर्नैऋतप्रेक्षाः षडेते युद्धकाक्षिणः ॥

and elephant

वा. रा. यु. का. ६९, १

टीका—आयुषप्रहारनिहारकौषधिविशेषैः

वा स्वसैन्यं रक्षे

“The best among the monkeys, being fruit-eaters them these divine roots and fruits and the divine medicines ferer fr

“Those monkeys having picked up all medicinal herbs its inf
and roots, made him keep them and spoke these words.” ently

“Those mighty demons who desired a fight, sallied out all the six of them having anointed their bodies with all the medicinal herbs and perfumes.”

Precautions in the military camp—

न दिवा ज्वालेदग्निं वर्जयित्वाऽग्निहोत्रिकम् ॥ ४८ ॥

कर्मरारिष्ठशालासु ज्वलेदग्निः सुरक्षितः ।

गृहाणि च प्रवेश्यन्तर्विधेयः स्यादुत्ताशनः ॥ ४९ ॥ म. भा. शा. प. ६९, ४९

“No fire, except the sacrificial one, should be lighted during the day. The fire should blaze well protected in the artificer's chamber as well as the lying-in-chamber.

Having caused admittance in the house, the fire should be lighted inside.”

References regarding kinds of medicinal herbs specially used for war-wounds are found in Rāmāyaṇa.

मृतसंजीवनीं चैव विशल्यकरणीमपि ।

सावर्ण्यकरणीं चैव संधानीं च महौषधीम् ॥ ३३ ॥

वा. रा. यु. स. ७४

“They collected the divine medicinal herbs which may help the revival of consciousness, the extraction of arrows, the restoration of normal colour and the joining of bones.”

The medicinal herbs that helped extraction of arrows, and the healing of the wound, which gave the normal coloration to the scar and which helped the revival of consciousness are found to be collected and stored for war purposes.

There were a number of operating surgeons in the military hospital with complete equipment.

उपातिष्ठन्नथो वैद्याः शल्योद्धरणक्षोविदाः ।

नानोपकरणैर्युक्ताः कुशलैः साधु शिक्षिताः ॥

म. भा. सीष्म. अ. १२०, ५५

"There waited upon him the physicians who were expert in the extraction of arrows, who were fully equipped and who were coached up well by the skilful (teachers)."

Treatment in the military hospital was for three kinds of patients viz., विप-गल्य-आनयादिताः

Those afflicted by--

1. Poison.
2. War injuries.
3. Ordinary diseases.

Princes and warriors were expected to possess sufficient knowledge of various branches related to military operation.

नानाशास्त्रेषु संग्रहे वैशारद्यमस्मिन् ।

अदृश्यमेव वोढव्यं काम्यश्च विजयो रणे ॥ १४ ॥ वा-रा-सुं ४८

"O subduer of enemies! proficiency in the various branches of science must essentially be had on the battlefield and then one should expect victory in the battle."

War ethics of the ancient times were of very high order.

निष्प्राणो नाभिहिन्यो नानपश्यः कथञ्चन ।

म. भा. शा. प. १५, १२

"Never a blow should be dealt to a man who is lifeless or childless."

The chivalry of that age certainly did not neglect to include an organisation similar to our red-cross society, to extend surgical and medical relief to those injured in battle irrespective of the side to which the ailing belonged.

चिह्नितस्यः कृशास्त्रविषये प्राण्यो वा स्वगृहे भवेत् ।

निर्गन्धश्च विमोक्तव्य एष धर्मः सनातनः ॥

म. भा. शा. प. १५, १३

"That is a permanent observance that if a (wounded) opponent be in one's own territory or if he comes to one's house, he should be

treated; and when the wounds have fully healed up then only he should be allowed to go."

अनीकयोः संहतयोर्यदीयाद् ब्राह्मणोऽन्तरा।

शान्तिमिच्छन्नुभयतो न योद्धव्यं तदा भवेत् ॥

म-भा-शा-प-२६, ८

"If a Brāhmaṇa, desiring peace on both sides, intervenes between the armies drawn close, then there should be no fight."

In the same way, the physician may take the place of a Brāhmaṇa.

अयुध्यमानं प्रच्छन्ने प्राञ्जलिं शरणागतम्।

पलायन्तं प्रमत्तं वा न त्वं हन्तुमेहाहंसि ॥

वा. रा. यु. का. ८०, ३९

"You should not kill an adversary who is not fighting, who has hidden himself, who has his hands folded, who has come for refuge, who is fleeing away or who is off his guard."

The two anecdotes, one from Rāmāyaṇa and one from Mahābhārata, given below will give the true conception of the clinical examination, the military surgeon was doing, and how the surgeons were called for surgical aid and the manner in which they behaved.

राममेवं ब्रवाणं तु शोकव्याकुलितेन्द्रियम्।

आश्वासयन्नुवाचेदं सुषेणः परमं वचः ॥ २३ ॥

नैव पञ्चत्वमापन्नो लक्ष्मणो लक्ष्मिवर्धनः।

न ह्यस्य विहृतं वक्त्रं न च श्यावं न निष्प्रभम् ॥ २५ ॥

सुप्रभं च प्रसन्नं च मुखमस्याभिलक्ष्यते।

पद्मपत्रतलौ हस्तौ सुप्रसन्ने च लोचने ॥ २६ ॥

नेदृशं हृदयते रूपं गतासूतां विशांपते।

वीर्यायुषस्तु ये मर्त्यास्तेषां तु सुखमीदृशम् ॥ २७ ॥

नायं प्रेतस्त्वमापन्नो लक्ष्मणो लक्ष्मिवर्धनः।

विषादं मा कृथा वीर सप्राणोऽयमरिदम ॥ २८ ॥

आख्यातिं तु प्रसुप्तस्य स्रस्तगात्रस्य भूतले।

त्रोच्छ्वासे हृदये वीर कम्पमानं सुहृदुः ॥ २९ ॥

"Suṣeṇa addressed this excellent speech consoling Rama who was speaking thus and whose sense-faculties were agitated owing to grief.

Lakṣmaṇa, the increaser of good luck, is definitely not dead; because his face is neither disfigured nor turned dark nor lustreless.

His face bears a lustrous and pleasing appearance. His palms are just like lotus-leaves and his eyes are brilliant.

O king! never can there be such an appearance of the dead. Those mortals alone, whose life-span is long, do bear such a face.

This Lakṣmaṇa, the increaser of prosperity, is not dead. Therefore O mighty hero! don't plunge yourself into grief. O subduer of enemies, he does possess life.

O powerful warrior, this condition is declared by the heart which palpitates often and on, accompanied by respiration, while he is lying on the ground with his limbs loosened."

सपातिष्ठन्नथो वैद्याः शल्योद्धरणकोविदाः ॥ ५५ ॥

सर्वोपकरणैर्युक्ताः कुरालैः साधु शिक्षिताः ।

तान्दृष्ट्वा जाह्नवीपुत्रः प्रोवाच तनयं तव ॥ ५६ ॥

धनं दत्त्वा विसृज्यतां पूजयित्वा चिकित्सकाः ।

एवं गते मयेदानीं वैद्यैः कार्यमिहास्ति किम् ॥ ५७ ॥

क्षत्रधर्मे प्रशस्तां हि प्राप्नोऽस्मि परमां गतिम् ।

नैव धर्मो महीपालाः शरतल्पगतस्य मे ॥ ५८ ॥

एभिरेव शरैश्चाहं दग्धव्योऽस्मि नराधिपाः ।

तच्छ्रुत्वा वचनं तस्य पुनो दुर्योधनस्तव ॥ ५९ ॥

वैद्यान्विसर्जयामास पूजयित्वा यथार्हतः ।

The presence of great and skilled surgeons and physicians on the battlefield behind the lines is clear from the anecdote in the Mahābhārata, wherein we find that a great number of surgeons skilled in operative measures and equipped with many kinds of instruments and apparatuses poured into the tent where the wounded general Bhīṣma lay. They offered to treat him. But the heroic Bhīṣma turned to Duryodhana, the king, and said, "Give generous and befitting presents of money to these good surgeons and pay them due honor and send them away. For to me in this condition no treatment is welcome. The greatest boon for a Kṣatriya is death on the

battlefield and I covet it. I must be allowed to die with these arrows on which I lie like on a bed. With them let me be cremated." Listening to this heroic utterance, all applauded and the surgeons left him to his glorious end.

CHAPTER VI

NURSING

The quality of mercy is doubly blessed. It blesseth him that gives and him that receives. Mercy is the younger sister of sympathy both being born of the humane spirit. The objective search for the origin of medicine may lead us to Hippocrates or Âtreya, but the subjective search for the origin of medicine will always lead us to this subtle spirit of mercy or sympathy, the fountain source of inspiration and the origin of the medical science. Dr. Payne, the well known American Historian has well said, 'The basis of medicine is sympathy and the desire to help others and whatever is done with this end, is called medicine.'

Caraka and Suśruta, the greatest medical works of India have in unequivocal terms ascribed the origin of medical science to this universal spirit of mercy and love (सर्वभूतहितम्).

The whole man is a conglomeration of such varied factors as body, mind and spirit. The first is material and absolutely visible and examinable. The second can be inferred by its actions while the third is yet in the field of speculation. The diverse natures of these component factors that go to make the whole man has provided cause for contention between religions and philosophies, between sciences and superstitions, and priests and physicians.

It is remarkable that birth of the Buddha coincided with the height of intellectual development of India. The age between B. C. 600 to 200 A. D. was the time when scientific medicine was evolved and took a definite shape. It was Buddha who extended the benefits of scientific medicine to humanity at

cleanliness, a sense of proportion and a capacity for and habit of accurate statement. Training can only strengthen these qualities and habits. It cannot produce them."

There is an interesting story depicting to what noble heights the institution of nursing reached in the Buddhist period. It also depicts clearly how the public took undue advantage of it turning its very strength into its weakness.

Jivaka, the Physician to the Buddha

The Medical treatment of the Buddha and his order of followers was entrusted by generous king of Magadha, Seniya Bimbisāra, to Jivaka Komarabhachcha, the Royal physician, an excellent young doctor, who had orders to wait upon the King, his Seraglio and the fraternity of Bhikkhus with the Buddha at its head (Mahav. viii 1, 15-16). He was a most distinguished medical authority of his times, well versed in both medicine and surgery, and had calls from distant places like Sāketa, Benares, and Ujjenī, always to treat diseases which baffled the skill of other medical practitioners. The free provision of such expert medical aid for the order was one of the temptations to the lay public to join it. There is a story that on the outbreak in Magadha of the five diseases of leprosy, boils, dry leprosy, consumption, and fits, the people suffering from them approached Jivaka and said, "Pray, Doctor, cure us and all that we possess shall be yours and we will be your slaves". But the Doctor said: "I have too many duties, Sirs, and am too occupied. I have to treat the Magadha King Seniya Bimbisāra and the royal seraglio, and the fraternity of Bhikkhus with the Buddha at their head. I cannot cure you". Now those people thought: "Indeed the precepts which these Śākyaputtiya Samanas keep and the life they live are commodious; they have good meals and lie down on beds protected from the wind. What if we were to embrace the religious life among the Sakyaputtiya Samanas; then the Bhikkhus will nurse us and Jivaka Komarabhachcha will cure us." Thus these persons got themselves ordained by the unsuspecting Bhikkhus and then secured the Bhikkhus to nurse and the physician Jivaka to treat them. The demands of the sick made the Bhikkhus

constantly beg for food for the sick, while Jivaka, having to treat so many sick Bhikkhus, neglected some of his duties to the king. This stratagem worked so well that persons similarly afflicted with one or other of those diseases began to offer themselves for monkhood, not for the sake of the religious life but simply to exploit the order, to get themselves nursed and cured and then to return to the world, for the entry into the order was as easy as exit therefrom. The entire corrupt practice was, however, one day completely exposed when Jivaka in the course of one of his medical rounds noticed a run-away renegade tramping the public roads and subjected him to a cross examination which revealed the whole truth. On Jivaka reporting the matter to the Buddha, he ruled that no person seeking the order in sickness should be admitted (Mahay; i, 39).

Specialization

Scientific progress always leads to specialization and we find the following classifications of nursing work.

1. General nursing.
2. Surgical nursing.
3. Midwife.
4. Wet-nurse.
5. Masseuse.
6. Miscellaneous.

The details regarding the qualifications of nurses in each category give a clear concept of the standard of nursing in those days.

I. Qualities in General nurses—

मिषद्वयानुपस्थाता रोगी पादचतुष्टयम् ।

च. सू. ९, ३

“The physician, the drugs, the attendant and the patient constitute the four basic factors of treatment”.

उपचारज्ञता दाक्ष्यमनुरागश्च भर्तारि ।

स्त्री च चेति चतुष्टोऽयं गुणः परिचरे जने ॥

च. सू. ९, ४

“Knowledge of nursing, skill, affection for the master (patient) and cleanliness, these four are the tetrad of desiderata in the attending person.”

ततः शीलशौचाचारानुरागदाक्ष्यप्रादक्षिण्योपपन्नोपचारकुशलान्, सर्वकर्मसु पर्यवदातान्, सुौदन-
पाचकस्नापकसंवाहकैत्यापकसंवेशकौषधपेयकांश्च परिवारकान् सर्वकर्मस्वप्रतिकूलान्

च. सू. १५, ७

“Then (the following accessories should be kept ready) the attendants who have character, cleanliness, good conduct, affection. dexterity and sympathy, who are well versed in nursing. who are circumspect in all work, who are skilled in the cooking of soups and rice, in giving baths and shampoo, in lifting or laying the patient in bed and in administering medicines and who are not disinclined to any kind of work”.

अनुरक्तः शुचिर्दक्षो बुद्धिमान्परिचारकः

अ. ह. सू. १-२०

“A nurse should be devoted to the patient, clean, clever (in all duties) and intelligent”.

तत्र परिचारकसंपत्—विपक्वकषायता, आरोग्यं, शक्तिः, भर्तृभक्तिः, उपचारज्ञता, दाक्ष्यं, शौचम्, आशुकारित्वम्, सर्वकर्मसु कौशलम्, अघृणित्वम्, अक्षुद्रपुत्रत्वम्, अद्वैविध्यम्, दमः, जितक्रोधादिता, सहिष्णुता चेति ॥

कादयप. सू. २६, ७

बलवान्दक्षिणो दक्षः प्रियवागर्थगुप्सकः ।

वीरश्चाप्रतिकूलश्च रक्षश्चित्रकथस्तथा ॥

प्रज्ञावांश्चाप्युपस्थायी तथा शास्त्रानुसारतः ।

न चातिप्रतिवन्नीयात्सर्वेष्वौषधकर्मसु ।

प्रशस्यते क्लेशसहः प्रतिश्रावी यथागुणः ।

मे. सू. ९

“The qualifications of the nurse are an enlightened temperament, good health, ability, devotion to the master, knowledge of nursing, skill, cleanliness, promptness in execution, all-round deftness, not being given to disgust, possessing sons who are not low in nature or in number, not wavering in mind, given to self-restraint, having control over the temper etc., and having forbearance”.

"He should be strong, upright, skilful, pleasant in speech, trustworthy, courageous, not indocile, attached to and good at entertaining the patient with varied tales and wise in attendance. He must not be bound down by technicalities. He must be trained in the preparation of medicines and he must be able to bear strain and to respond to the moods of the patient'.

2. Qualities in Surgical nurses

स्निग्धोऽनुगुप्सुर्बलवान् युक्तो व्याधितरक्षणे ।

वैद्यवाक्यकृद्श्रान्तः पादः परिवरः स्मृतः ॥

सु. सू. ३४, २४

"That attendant is a proper support among the tetrad of supports of medicine, who is affectionate, free from disgust, strong, engaged in the protection of the patient, prompt in the execution of the physician's instructions and is tireless in his duties."

3. Qualities in a Midwife

स्त्रियश्च बहुभ्यो बहुशः प्रजाताः सौहार्दयुक्ताः सततमनुरक्ताः प्रदक्षिणाचाराः प्रतिपत्तिकुशलाः
प्रकृतिवरधलास्त्यक्तविषादाः क्लेशसहिन्योऽभिमतः ।

च. शा. ८, ३४

"The female attendants should be many, who are mothers of many children, sympathetic, constantly affectionate, of agreeable behaviour, resourceful, naturally kind-hearted, cheerful and tolerant of hardships."

अशक्कनीयाश्चतस्रः स्त्रियः परिणतवयसः प्रजननकुशलाः कर्तितनखाः परिचरेयुः ।

सु. शा. १०, ८

"There should be four female attendants who are of good reputation, fully grown in age, who have given birth to many children and whose nails have been clipped close".

बहुशः प्रस्तामिरनुरक्ताभिरविवादिनीभिरविषेवादिनीभिः क्लेशसहामिः परिश्रुता.....प्रसवकालमुदीक्षेत ।

अ. सं. टीका. शा. १, ७४

"The woman in labour should lie in bed surrounded by female attendants, who have given birth to many children, who are cheerful by temperament, who are not given to obstructive speech and who are able to bear strain".

4. Qualities in a Wet-nurse

समानवर्णा यौवनस्थां निवृत्तामनातुरामव्यङ्गामव्यसनामविरूपामजुगुप्सितां देशजातीयामक्षुद्रामक्षुद्र-
कर्मिणीं कुले जानां वत्सलामरोगां जीवद्वत्सां पुंवत्सां दोग्ध्रीमप्रमत्तामनुचारशायिनीमनन्त्यावशायिनीं कुशलोपवारां
शुचिनिशुचिद्वेषिणीं स्तनस्तन्यमंपदुपेतमिति । च. शा. ८, ५२

"Bring a wet nurse who belongs to the same caste as the infant's mother, who is in her youth, submissive, free from disease, not deficient in any limb, not given to unwholesome pursuits, not ugly, not ill-disposed, native of the country, not mean-minded, not given to mean acts, well-born, affectionate towards children, free from any disease, whose children have not died, who is a mother of male children, who has a large supply of milk, who is never heedless, not given to sleeping in beds soiled with excrement, not given to low company, skilful in attendance, clean, averse to unclean ways and endowed with the excellence of breasts and milk".

ततो यथावर्णां धात्रीमुयेयान्मध्ययमाणां मध्यवयस्कामरोगां शीलवतीमचपलामलोडुपामकुशामभ्यूलां
प्रसन्नक्षीरामलम्बबौद्धीमलम्बोर्ध्वस्तनीमव्यङ्गामव्यसनेनीं जीवद्वत्सां दोग्ध्रीं वत्सलामक्षुद्रकर्मिणीं कुले जातामतो
भूयिष्ठेश्च गुणैरन्वितां श्यामामारोग्यबलवृद्धये बालस्य । तत्रोर्ध्वस्तनीं करालं कुर्यात्, लम्बस्तनीं नासिकामुखं
छादयित्वा मरणमापादयेत् । सु. शा. १०, २७

"Then one should requisition for the enhancement of health and strength of the baby, a wet nurse of dark complexion, according to the required caste, one who is medium sized, middle aged, healthy, possessing good habits and steadiness of mind, who is free from sensuality, who is neither too thin nor too fat, whose breast-milk is clear, who has no pendulous lips and whose breasts are not too high nor too low, who has no bodily defects, who is not given to any evil addiction, who has a living child, whose lactation is abundant, who is affectionate and not given to any censurable practice, who is born of a good parentage and is endowed with many other good qualities. A nurse of high breasts makes the child ugly in appearance. That possessing pendulous breasts, may sometimes, by choking the nostrils of the baby bring about its death".

5. Masseuse

सुखशिक्षितहस्तानां स्त्रीणां सुवाहनेन च ।

मदात्ययः कफप्रायः स्त्रीमेव प्रशाम्यति ॥

च. चि. २४, १८८

“By soothing warm massage of the body by the well trained hands of women, the alcoholism of the kapha type abates quickly’.

This shows that massaging was often resorted to.

6. Miscellaneous attendants

तथा गीतवादित्रोलापकश्लोकगाथाख्यायिकेतिहासपुराणकुशलानभिप्रायज्ञाननुमतांश्च देशकालविद्ः
वारिवशांश्च । च. सू. १५, ७

“Those who are well-versed in singing, playing of musical instruments, panegyrics, verses, stories, legends, modern history, mythology, who are quick in understanding, who are of approved character, who are versed in the knowledge of clime and season and who are good members of society”.

अनपत्रपणीयाः सुहृदोऽनुमताः ।

च. सू. १५१ ७

“ Affectionate and sympathetic friends before whom the patient is free from shyness”.

तस्मिन्सुहृद्भिरनुकूलैः प्रियंवदैरुपास्यमानो यथेष्टमासीत् ।

सुहृदो विक्षिपन्त्याशु कथामिर्त्रणवेदनाः ।

आश्वासयन्तो बहुशः स्वातिकूलाः प्रियंवदाः ॥

सु. सू. १९, ७-८

“The surgical patient should lie at ease attended by sympathetic friends and who are endearing in speech. Sympathetic and pleasant-speeched friends by their comforting words and speech quickly alleviate the suffering of wounds.”

Thus we see that the institution of nursing was very highly developed, and was well organised but in course of time, this organized, useful and benevolent institution fell into decay together with other arts of this country. It was on the way to oblivion when contact with the West gave an impetus to its revival. Looking to the needs of the teeming millions of this country, an organized effort is needed to put this benevolent avocation on to a high footing and thereby render medical aid and at the same time supply the means of livelihood to the helpless women and widows of our land. It is, however necessary, that instead of simply copying western modes of behaviour and manners only, we should

develop its scientific spirit combined with indigenous atmosphere and quality of compassion for the ailing.

The nurses should so behave and mingle with the people, speaking the language of the place, knowing the needs of the people, preparing and advising the diet suited to and liked by the masses and by becoming one with them.

The institution revived on these lines will no doubt alleviate most of the sufferings of masses and will bring sunshine and happiness to the cheerless atmosphere of the sick-beds.

CHAPTER VII

VETERINARY SCIENCE

The comprehensive nature of Āyurveda is evident from the very definition of the science. It is the science of life, life in its widest sense of the term and not in its circumscribed and narrow sense containing only the highest evolved form of life i. e. human beings, who form only an insignificant number among the host of living creatures. The universal sense of Āyurveda has not only not neglected the mute living creatures howsoever low they be, but it has also put the veterinary science on a par with the science that deals with ailments of man. The birds, the animal kingdom and the vegetable kingdom, all these are but different forms of that divine spark called life and Āyurveda has as good and as voluminous treatises on the vegetable kingdom (वृक्षायुर्वेद) or horses (अश्वायुर्वेद) or elephants (हस्त्यायुर्वेद) or the bovine species (गवायुर्वेद) and even on Hawks (श्येनकायुर्वेद) as it has on the science of human life. Besides these special treatises we find that the general books on medicine almost always included some portion dealing with this special branch of veterinary science. In the Caraka Saṃhitā we find this subject referred to in chapter 11 of Siddhisthāna verses 19-26.

In Hārīta Saṃhitā also we find the following references—

तस्माद्वक्ष्यामि चाशौ उग्रमतुल्यगदं वाजिनां कुञ्जराणां
मातुष्याणां पशूनां मृगमहिषखरोष्ट्रादिवातस्पतीनाम् ।

बलीनामोषधीनां क्षतिधरफणिनां पत्रिणां मूषिकानां
एष प्राणापहारी ज्वर इति गदितो दुर्निवारो हि लोके ॥

हारीत. सं.

“I shall now describe fever, the unrivalled of diseases and which affects all creatures such as the horses, elephants, men, beasts, deer, buffaloes, asses, camels etc., and the forest trees as also creepers, shrubs, mountains, serpents, birds and mice. This disease which is difficult of cure and destroys life is called fever in this world.”

Specialization of this subject is reflected in the special terms used to signify the condition of fever in various animals as is seen in the table given below.

नरेषु-ज्वरः	व्याडेषु-आक्षिकः	शुनस्सु-अलर्कः	धान्येषु-चूर्णकः
इधेषु-अमितापः	अजादिषु-पलापकः	मत्स्येषु-इन्द्रमदः	कोद्वेषु-ललः
खरेषु-खोरकः	सरीसृपेषु-कष्णीषः	गल्मेषु-गुच्छकः	शक्रेषु-मधूकः
गोषु-ईश्वरः	गदिषेषु-हारिद्रकः	ओषधिवनस्पतिषु-ज्योतिष्कः	भूम्याम्-ऊषरः
उष्ट्रेषु-अलसकः	मृगेषु मृगरोगः	माल्येषु-पर्वकः	अप्सु-नीलिका
	पक्षिषु अवतापः	नलिनीषु-ऋषभकः	गजेषु-पाकलः

Thus we learn that elementary knowledge of veterinary science formed a part of general medical education. The humane spirit of Āyurveda was not satisfied with providing just a niche for veterinary science in the vast structure of the healing lore. Veterinary science produced specialists and their treatises are, as said before, as elaborate and scientific as those meant chiefly for human treatment. The name of Śālihotra stands supreme in this branch of Āyurveda. He is described as the Father of the veterinary science. He describes the origin of the science in the same way as Caraka and Suśruta do, claiming direct link with Brahmā, the fountain-head of all medical and holy lore. Irrespective of its historical authenticity, it establishes that same divine origin of and the consequent halo round the veterinary science as do the treatises of Caraka and Suśruta. The treatise is known as Hayāyurveda (हययुर्वेद) or Turāṅgama-śāstra (तुरंगमशास्त्र) or the science of horses. The original Śālihotra-Saṃhitā (शालिहोत्रसंहिता) consists of 12000 verses.

एवं विसृज्य तान् स्वर्गान् शालिहोत्रस्तुरङ्गमान् ।

चक्रे द्वादशवाहनीं तदर्थं संहितां सुवीः ॥

"Wise Śālihotra made this treatise on horses consisting of 12000 verses having told the horses that went to heaven to go back".

It is interesting to note that this number of verses viz., 12000 is also the number of verses in Agniveśa-saṃhitā (अग्निवेशसंहिता). च. सि. १२-५२

The similarity does not end with the number of verses. Just as Āyurveda is divided into 8 sections this science also has been Aṣṭāṅga (अष्टाङ्ग) i. e. divided into eight sections.

The treatise of Śālihotra gained currency due to its excellence and we find that Agni Purāṇa quotes Śālihotra. Matsya and Garuda Purāṇas also refer to Hayāyurveda. This Śālihotra-saṃhitā has been translated into Persian, Arabic, Tibetan and English, the Persian translation dating as early as 1387 A. D. The fame of this work spread so much in the near East that in Persian and Urdu the word Śālotri stands for the horse doctor in their lexicons.

The veterinary science was not just a subject for professional practitioners. The horse was a very useful animal in the wars and princes took pains to acquire mastery in the science and we have several instances of scions of royal dynasties who were famous for their learning in this field. King Nala was so well-versed in the science of horses that he earned the name of Aśvavid (अश्वविद्). Nakula and Sahadeva, the twin sons of Madri, acquired the science from Droṇa Guru.

क्षिप्रं च गावो बहूला भवन्ति न तासु रोगो भवतीह कश्चन ।

तैस्त्वरूपायैर्विदितं ममैतदेतानि शिल्पानि मयि स्थितानि ॥

म. भा. विराटपर्व १०-१३

अश्वानां प्रकृतिं वेत्ति विनये चापि सर्वशः ।

दुष्टानां प्रतिपत्तिं च कृत्स्नं चैव चिकित्सितम् ॥

म. भा. विराटपर्व १२, ७

The horse was not however the only animal which received the attention of medical authors. Elephants and cows received equal attention. We have the Pālakāpya Saṃhitā devoted solely to elephants. It is divided into 4 sections with 152 chapters in all. It comprises

more than 10000 verses or 20000 lines and it is almost as big as Caraka Saṃhitā. Naturally such an elaborate treatise gives detailed information about the anatomy, surgery, physiology, pathology, major and minor diseases of and the diet and the drugs for elephants. We read in the descriptions of the wars of the ancient times that besides horses there were thousands of elephants on the battlefield and that was how the whole of of Hasti-Āyurveda came into being.

Govaidyaka (गोवैद्यक), treatment of the bovine species, is another branch of the veterinary science and this too has received full attention in Āyurveda. Similarly, goats and sheep, donkeys and camels, and even hawks were not neglected and we find special branches of treatises on these subjects.

For the welfare and health of these animals which were useful to the human being in many ways, veterinary physicians were engaged to treat the animals in their illness save the society from infection and keep the animals fit. These physicians took every precaution against epidemics among the cattle and tried preventive as well as curative medicines. Physicians were also kept ready on the battlefield for treating the animals wounded in the war.

These physicians inspected the animals which were for sale in the market in order to prevent the spread of infection. Meat for sale in the market was also inspected and the sale of putrid or diseased flesh was strictly forbidden by means of severe punishment for such offences. The state not only took such measures for the health of the people and of the animals in this way, but it imposed fines on the physicians in charge of the animals if they committed a mistake in the treatment by carelessness or by any other reason.

Ill treatment to animals or even to the vegetable life was not tolerated and fines and punishment were imposed on the miscreants. Any one who sterilized animals without state permission was severely dealt with.

Viṣṇu Saṃhitā and Parāśara Saṃhitā lay down expiatory ceremonies and injunctions for crimes against animals. Punishment was meted out in proportion to the degree of heinousness of the crime e. g. "the blood of the killed cow was to be carefully examined

and tested in order to ascertain whether she was lean or diseased when alive, as the nature of punishment varied according to the state of the cow's health at the time of her death. Hence the testing was to be done very carefully." Parāśara saṃhitā 9, 50

Every possible measure was taken by the state and the society for protecting their animals from thieves, carnivorous beasts, snakes, pythons, crocodiles and infectious diseases.

It was owing to the utility coupled with the helpless condition of these dumb animals that humanitarian princes like Aśoka organised hospitals for animals and passed orders against cruelty to them. Our modern Pinjarapoles are but the poor and dilapidated relics of these hospitals organised on humane principles. These Pinjarapoles are but the reminders of the glory that was once India when India was the torch-bearer of the world in all fields of humanitarian service whether it be war or peace, or science or art.

A few instances culled from our vast veterinary science and its ethics will suffice to show how meticulous the injunctions were.

गोध्यक्ष—The superintendent of cows

बालवृद्धव्याधितानां गोपालकाः प्रतिकुर्युः

"Superintendents of cows shall apply remedies to calves or aged cows or cows suffering from diseases."

अश्वध्यक्ष—The superintendent of horses

क्रियामैषज्यसङ्गेन व्याधिवृद्धौ प्रतिकारद्विगुणो दण्डः । तद्वरोधेन वैलोम्ये पत्रमूल्यं दण्डः । तेन गोमण्डकं खरोष्ट्रमहिषमजार्बिकं च व्याख्यातम् ॥

"When owing to defects in medicine or carelessness in the treatment, the disease becomes intense, a fine or twice the cost of the treatment shall be imposed and when owing to defects in medicine, or owing to not administering it the result becomes quite the reverse, a fine equal to the value of the animal shall be imposed."

हस्त्यध्यक्ष—The superintendent of Elephants

हस्तिचिकित्सकः—The elephant doctor

चिकित्सककुटीररक्षविधावाचकाः प्रस्थैदनं स्नेहस्यति क्षारलवणयोश्च द्विपलिकं हरेयुः । दशपलं मांसस्यान्यत्र चिकित्सकभ्यः ।

“Elephant doctors, watchmen, sweepers, cooks and others shall receive (from the store-house) one Prastha of cooked rice, a handful of oil and two pails of sugar and of salt. Excepting the doctors, others shall also receive 10 Palas of flesh.”

Animals were scrupulously cared for while on journey.

पथि व्याधिकर्ममदजराऽभितप्तानां चिकित्सकाः प्रतिकुर्युः ।

“Elephant doctors shall administer necessary medicines to elephants which while making a journey, happen to suffer from disease, overwork, rut or old age”.

General—

अजादीनां षाण्मासिकीपूर्णां ग्राहयेत् । तेनाम्बखरेष्ट्वराह्वना व्याख्याताः ॥

“Once in six months sheep and other animals shall be shorn of their wool. The same rule shall apply to herds of horses, asses camels and hogs.”

With the ancients the animals were not mere useful servants, but they were treated in the same spirit as family members and well looked after. The interdependence of human beings and animals as regards mutual welfare demands of us that we should take every possible care of animals in health and disease. It behoves us to spare no pains in establishing and organising our efficient service in order to alleviate the ailment of animals. Our Pinjarapoles should be revived on scientific lines. Only then shall we have done our duty, only then shall we be able to establish our claim to be called civilized and only then shall we have put into practice our ideal of Jīva-dayā i. e. Compassion to all living creatures for which India has always stood supreme.

CHAPTER VIII

HOSPITALS AND EQUIPMENT

One of the greatest fictions of modern times is the belief that the institution of hospital is a gift of the modern civilization. This fiction is the result of gross ignorance of the history of ancient Indian institutions and neglect of the study of Indo-Āryan culture. A researcher in the history of ancient Indian institutions would, soon after he has waded through the darkness of historical material resulting from the depredations of foreign invaders, find that institutions of hospitals had a very early development in India. We have ample proofs of the existence and development of hospitals in the Purāṇas, medical works, inscriptions and foreign travellers' memoirs.

In Nandi Purāṇa we find the following reference:

धर्मार्थकाममोक्षाणां आरोग्यं साधनैर्गुतः ।
 अतस्त्वारोग्यदानेन नरो भवति सर्वदा ॥
 आरोग्यशालां कुरुते महौषधपरिच्छदां ।
 विदग्धवैद्यसंयुक्तां सृत्यवसथसंयुतां ॥
 वैद्यस्तु शास्त्रवित् प्राज्ञो दृष्टौषधपराक्रमः ।
 औषधीमूलवर्णज्ञः समुद्धरणकालवित् ॥
 रसवीर्यविपाकज्ञः शालिमांसौषधीगणे ।
 योगविद्देहिनां वैद्यो यो धिया प्रविशेद् बुधः ॥
 धातुपथ्यामयज्ञश्च निदानविदतन्त्रितः ।
 व्याधीनां पूर्वलिङ्गज्ञस्तदुत्तरविधानवित् ॥
 देशकालविधानज्ञश्चित्तसाक्षात्तया ।
 अष्टाङ्गायुर्वेदवेत्ता मुष्टियोगविधानवित् ॥

Good health is means of acquiring religious merit, wealth, pleasure and spiritual emancipation, and so the man who bestows cure on the sick as also he who endows a hospital fully equipped with good medicaments, dressing material, learned physicians, servants and breathing space, gain these results. The physician should be well versed in the science, experienced, familiar with the actions of drugs, expert in the knowledge of the colour of the roots of herb and well acquainted with the proper season in which to cull them from

the ground, well versed in the qualities of the juices, (their strength and actions), of Śali rice, meat and medicaments, trained in compounding medicines, expert in intelligent penetration into the secret of a man's constitution, learned in the knowledge of body-elements, dietetics and pathology, free from indolence, well versed in the understanding of the premonitory symptoms and in after-treatment, proficient in the knowledge of time and place, well read in the medical text books of Āyurveda in all its eight divisions and an expert in Posology".

The same Purāṇa further describes the merits accruing from establishing a hospital in the following verses.

एवंविधः शुभो वैद्यो भवेद्यत्राभियोजितः ॥
 आरोग्यशालामवनौ कुर्याद्यो धर्मसंश्रयः ।
 सम्यगारोग्यशालायामौषधैः स्नेहपाचनैः ॥
 व्याधितं विरुज्जीकृत्य अप्येकं करुणायुतः ।
 प्रयाति ब्रह्मसदनं कुलसम्पत्संयुतः ॥
 आढ्यो वित्तानुसारेण दरिद्रः फलभाग् भवेत् ।
 दरिद्रस्य कुतः शाला आरोग्याय भिषग् युवा ॥
 अपि मूलेन केनापि मर्दनाद्यैरथापि वा ।
 स्वस्थीकृते भवेन्ममते पूर्वोक्तं लोकमन्ययं ॥
 वात-पित्त-कफाश्रानां चयापचयभेदिनां ।
 यस्तु स्वल्पाभ्युपायेन मोचयेद् व्याधिपीडितान् ।
 सोऽपि याति शुभान् लोकान् अवाप्स्यान् यज्ञवाजिभिः ॥

"The pious man who erects such a hospital in which the services of a good physician of this nature are retained, and thus establishes charitable institution, in which the good physician cures even a single patient of his maladies by means of medicines, oleaginous remedies and compounds of medicinal decoctions, goes after death to Brahmā's residence taking with him seven generations of the ancestors. If the rich and the poor were to get treatment in proportion to the riches they possess and can spend, where would the poor man get a hospital and a young physician to cure his diseases. Any man that cures the sick by the use of roots or by massage and other methods also, reaches these eternal realms mentioned above. He who cures the sick suffering from discordance of the three Doṣas or Vāta, Pitta, and Kapha, by simple remedies, he too

goes to such blessed regions (after death) as are secured by those who performed many religious sacrifices (yajñas).

Again in the Skandapurāṇa (स्कन्दपुराण) we find similar references.

आरोग्यशालां यः कुर्यात् महावैद्यपुरस्कृताम् ।
 सर्वोपकरणोपेतां तस्य पुण्यफलं शृणु ॥
 धर्मार्थकामसंक्षाणामारोग्यं साधनं यतः ।
 तस्मादारोग्यदानेन तद्वत् स्याच्चतुष्टयम् ॥
 अथैकमात्रं विद्वांसं स्वस्थोक्त्य प्रयत्नतः ।
 प्राप्नोति सुमहत् पुण्यमनंतं क्षयवर्जितम् ॥
 ज्ञानयोगरतं ज्ञानं रोगार्तं शिवयोगिनं ।
 यः स्वस्थं कुरुते सोऽपि सर्वदानफलं लभेत् ॥
 ब्रह्मा विष्णुः सुराः सर्वे व्याधयः स्वजना नृपाः ।
 योगस्यैव महाविघ्ना व्याधयस्तेन योगिनाम् ॥
 ब्रह्मक्षत्रयविश्वदानं रोगार्तां परिपाल्य च ।
 यत्पुण्यं महदाप्नोति न तत्सर्वैर्महामखैः ॥
 आकाशस्य यथा नान्तः सुरैरप्युपलभ्यते ।
 तद्वदारोग्यदानस्य नान्तो वै विद्यते कश्चित् ॥
 पुण्येनानेन महता गत्वा शिवपुरं नरः ।
 मोदते त्विद्वैभोगैर्विमानैः सर्वकामिकैः ॥
 एकविंशति-कुलोपेतः सभ्यः परिपालितः ।
 आस्ते शिवपुरे तावद्यावदाहुतसंस्त्रवम् ॥
 ततः स्वधर्मशेषेण संप्राप्तः प्रयतः सदा ।
 ज्ञानमुपयते तस्य रुद्रेभ्यः परिचारकः ॥
 ज्ञानाद्वरिक्तः संमाराच्छिद्यक्यानुपाश्रितः ।
 स्वदेहं तृणवत्यक्त्वा सर्वदुःखान्तमाप्नुयात् ॥
 समस्तदुःखनिर्मुक्तः शुद्धः स्वात्मन्यवस्थितः ।
 सर्वज्ञः परिपूर्णश्च मुक्त इत्यभिधीयते ॥
 तस्मात् भोगापवर्गार्थं रोगार्तं समुपाचरेत् ।
 विशेषेण तु योगीन्द्रं शरीरेण धनेन च ॥
 रोगिणो न द्विजेत् प्राज्ञो दुर्बलानपि सर्वदा ।
 तान्पाशाद् गुरुवन्नित्यमेवं धर्मः प्रवर्तते ॥
 योऽनुगृहीतमात्मानं मन्यमानो दिने दिने ।
 उपसर्पेत रोगार्तं तीर्णस्तेन भवावः ॥
 इति आरोग्यदानम्

"Hear, what amount of religious merit accrues to a man who erects a hospital equipped with all the necessary elements beginning with eminent physicians. As good health is the means of attaining religious merit, wealth, pleasure and spiritual emancipation, therefore, does one, by giving health, give all these four blessings.

By curing learned man of his sickness such merit is acquired as is eternal and indestructible. He too who cures a sick man who is reposeful and absorbed in meditation and in the worship of Śiva, attains virtue equal to that which results from all kinds of alms-giving. Brahṁā, Viṣṇu, all the minor gods, diseases, relatives and kings, all these are obstacles to Yoga and are thus diseases, but not to the Yogi. Whatever merit can be obtained by the great, by supporting the ailing Brāhmins (priest), Kṣatriyas (warriors) and Vits (cultivators) and Śūdras (servants) cannot be obtained by the performances of all the great Yajñas (religious sacrifices). As even the gods cannot reach the end of the firmament, likewise is there no end to the merit accruing from the gift of healing. By this merit, the man reaching the realm of Śiva enjoys himself by soaring in celestial cars and attaining all his desires. Along with twenty-one generations of his ancestors and surrounded by his servants, he stays in Śiva's realm until the great destruction at the end of the cycle. Thereafter by the residual part of his merit, and by his devoted service to Rudra, he acquires knowledge of truth.

Renouncing this world as a result of knowledge, and dedicating himself to the worship of Śiva and casting away this body sorrows like a straw, he reaches beyond the limits of sorrows. Being freed from all and becoming pure, all knowing and self-sufficient and absorbed in his own self, he is called the liberated one. Therefore for the sake of heaven as well as liberation the sick should be well nursed and treated. The great sages given to Yoga should be especially attended to even at the cost of one's life and riches. The wise must never cause annoyance to the weak patients but should be attended to like one's own preceptor. That is the path of virtue. He who knows himself to be well-circumstanced in life should relieve the sick by taking them under his care, and thus reach the other bank of this ocean of life."

Construction of or an endowment for a hospital was considered to be an act of great merit as is evinced by the following quotations.

अत्राह विश्वामित्रः

आरोग्यदानात्परमं न दत्तं विद्यते क्वचित् ।
अतो देयं रजार्ताणामारोग्यं भाग्यद्वये ॥
औषधं पथ्यमाहारं तैलाभ्यङ्गप्रतिभ्यः ।
यः प्रयच्छति रोगिभ्यः समवेद् व्यथिवर्जितः ॥

संवर्तः

औषधं स्नेहमाहारं रोगिणां रोगशान्तये ।
ददानो रोगरहितः सुखी दीर्घायुरेव च ॥

अगस्त्यः

अऔषधप्रदातारः सुखं यान्ति निरामयाः ।

Viśwāmītra says here—

“There does not exist a gift greater than the gift of health, hence one should attempt to give health to the ailing for the attainment of one's own welfare. One who gives to the patient medicine, wholesome articles, meals, oil massage and consolation is ever free from the clutches of any disease”.

Samvarta says—

“One who gives medicine, oil and meals for the cure of the patient is himself ever free from any disease and is happy and long-lived”.

Agastya says—

“Those who give meals and medicine live happily and without disease”.

All the above three references are cited by Hemādri and they go to prove the early development of hospitals in India, at a time when the West could not even dream of them.

The earliest medical and surgical works like *Suśruta* abound in references to hospitals, usually known as पुण्यशाला, आरोग्यशाला, ब्रगानार etc.

The edict No. II of *Aśoka* shows that charitable institutions were common in India during his reign. The edict runs as follows:-

"Everywhere in the kingdom of the king Piyadasi, beloved of the gods, and also of the nations who live in the frontiers such as the Cholas, the Pandyas, the realms of Satyaputra and Keralaputra, as far as Tambapani and in the kingdom of Antiochus, king of the Greeks and of the kings who are his neighbours, everywhere the king Piyadasi, beloved of the gods, has provided hospitals of two sorts: hospitals for men and hospitals for animals.

Wherever plants useful either for men or for animals were wanting they have been imported and planted. Wherever roots and fruits were wanting they have been imported and planted. And long public roads have been dug for the use of animals and men."

Descriptions of Chinese travellers who toured India in the 5th and 7th centuries fully corroborate the fact of hospitals being an established institution in India of those days.

Fa hien (405-11-A. D.) who was a contemporary of Chandragupta Vikramāditya describes the charitable dispensaries of Pāṭaliputra thus, 'The nobles and householders of this country have founded hospitals within the city to which the poor of all countries, the destitute, the cripple and the diseased may repair. They receive every kind of requisite help gratuitously. Physicians inspect their diseases, and according to their cases order them food and drink and medicines, or decoctions, everything in fact that may contribute to their ease. When cured, they depart at their convenience'. Vincent Smith remarks:- 'No such foundation was to be seen elsewhere in the world at this date, and its existence anticipating the deeds of modern Christian charity speaks well both for the character of the citizens who endowed it and for the genius of the great *Aśoka* whose teaching bore such wholesome fruit many centuries after his decease. The earliest hospital in Europe, the *Maison Dieu* of Paris, is said to have been opened in the 7th century.'

The earliest medical and surgical works like *Suśruta* abound in references to hospitals, usually known as पुण्यशाला, आरोग्यशाला, ब्रगानार etc.

The edict No. II of *Aśoka* shows that charitable institutions were common in India during his reign. The edict runs as follows:-

"Everywhere in the kingdom of the king Piyadasi, beloved of the gods, and also of the nations who live in the frontiers such as the Cholas, the Pandyas, the realms of Satyaputra and Keralaputra, as far as Tambapani and in the kingdom of Antiochus, king of the Greeks and of the kings who are his neighbours, everywhere the king Piyadasi, beloved of the gods, has provided hospitals of two sorts: hospitals for men and hospitals for animals.

Wherever plants useful either for men or for animals were wanting they have been imported and planted. Wherever roots and fruits were wanting they have been imported and planted. And long public roads have been dug for the use of animals and men."

Descriptions of Chinese travellers who toured India in the 5th and 7th centuries fully corroborate the fact of hospitals being an established institution in India of those days.

Fa hien (405-11-A. D.) who was a contemporary of Chandragupta Vikramāditya describes the charitable dispensaries of Pāṭaliputra thus, 'The nobles and householders of this country have founded hospitals within the city to which the poor of all countries, the destitute, the cripple and the diseased may repair. They receive every kind of requisite help gratuitously. Physicians inspect their diseases, and according to their cases order them food and drink and medicines, or decoctions, everything in fact that may contribute to their ease. When cured, they depart at their convenience'. Vincent Smith remarks:- 'No such foundation was to be seen elsewhere in the world at this date, and its existence anticipating the deeds of modern Christian charity speaks well both for the character of the citizens who endowed it and for the genius of the great *Aśoka* whose teaching bore such wholesome fruit many centuries after his decease. The earliest hospital in Europe, the *Maison Dieu* of Paris, is said to have been opened in the 7th century.'

Ceylonese records furnish a lot of information in how the kings took up the erection and maintenance of hospitals as their chief duty. From Mahāvamsā we gather that in 437 B. C. King Pandukabhya constructed a residence for the Ajivakas, a hall for the worshippers of Brahmā, (another for those) of Śiva as well as a hospital.

“Duttha Gamani feeling his earthly journey ending (161 B. C.) asked that records of his reign be read to him and among the last words the dying king heard was, ‘I have daily maintained at eighteen different places, hospitals provided with suitable diet and medicines prepared by physicians for the infirm.’” (Robinson’s History of Ceylon)

We quote below a few references from the Mahāvamsā part II by L. C. Wijesinha Mudaliyar. P. 57. Chapt. XLIX. (King’s name Dappula III 827 A. D.)

“And being a man of great compassion he built a hospital for the city of Pullatthi and another at Pandaviya with a fruitful village attached thereto. He built hospitals for the halt and the blind in diverse places.”

P. 67 chapter L. King’s name Kassappi. (929 A. D.) “He built a house for the sick on the western side of the city and gave alms of gruel and other victuals for the destitute.”

P. 86. chap. LIV. Name of the king, Sena (955 A. D.) “He furnished all the hospitals also with medicines and beds and caused rice to be given daily to the captives that were in prison.”

P. 194–195 Chap. LXXIII. King’s name, Parakkama Bahu (1164 A. D.). “And this ruler of men built further a large hall that could contain many hundreds of sick persons and provided with all things, that were needful as stated underneath. To every sick person he allowed a male and a female servant that they might minister to him by day and by night and furnish him with the physic that was necessary and with diverse kinds of foods. And many store-houses also did he build therein, filled with grain and other things, and with all things that were needful for medicine and he also made provision for the maintenance of wise and learned physicians who were versed in all knowledge and skilled in searching out the nature

of disease. And he took care to discern the different wants of the sick, and caused the physicians to minister to them, as seemed necessary both by day and night. And it was his custom, on the four sabbaths (Uposatha days) of every month, to cast off his king's robes and after that he had solemnly undertaken to observe the precepts, to purify himself and put him on a clean garment, and visit that hall together with his ministers. And being endowed with a heart full of kindness, he would look at the sick with an eye of pity, and being eminent in wisdom and skilled in the art of healing, he would call before him the physicians that were employed there and inquire fully of the manner of their treatment. And if so be that it happened that the treatment that they had pursued was wrong the king who was the best of teachers, would point out wherein they had erred, and giving reasons therefor would make clear to them the course that they should have pursued according to science. Also, to some sick persons he would give physic with his own hands. In this manner indeed this merciful king free from diseases would himself cure the sick of their diverse diseases from year to year."

In one of the temple inscriptions of the Chola period, we find a detailed description of a hospital. Besides the several references to hospitals in the Gupta period we get the following reference dating 600 years after the period. Veer Rajendra Deva of the Cholas issued a commandment in 1067 A. D. which is inscribed on the walls of the inner sanctuary of the temple of Venkateshwar at Tirumakudal in the district of Chingleput. It provided for the expenses of the festivals of the diety and together with it a school and a hospital for the students. The hospital is described as under. It was named Shree Veer Choleshwar Hospital containings 15 beds. There were a physician, a surgeon, two male and two female nurses, one servant, one gate-keeper, a washerman and a potter. Their salaries were also fixed. One Kodani Ramashwatham Bhattar was engaged as the physician and he was given his remuneration in kind (a certain amount of corn). Next in order the remuneration in kind was fixed for the surgeon, nurses and others. The male nurses' duty was to bring herbs and firewood and to prepare medicines. The duty of female nurses was to administer

the doses, feed the patients and do the necessary cooking. The washerman's duty was to wash the clothes of the patients and the potter's duty was to prepare the necessary pottery for the hospital. The quantity of oil required to light the lamps at night was also fixed. Besides this set-up, there are instructions about special preparations also.

A later inscription dated 1262 A. D. is found on stone-pillar of Malakapur in the Andhra country. It contains references to Kakatiya queen Rudramma and to her father Ganapati's preceptor Vishweshwara's activities. This Vishweshwara was a Śaivite preceptor of Gaud Desha and the inscription informs us that several villages to the south of the Krishna were donated to him by Kakatiya Ganapati and Rudramma. The income accruing from these villages was divided into three parts and Vishweshwara ear-marked one-third of it for maternity home, one-third for a hospital and the remaining for a school. It is not definitely known whether this maternity home and the hospital were built by Vishweshwara or his predecessors but they were linked with the local Śiva temple.

Now we shall quote a few verse from the earliest medical treatises of specialized hospitals and their management.

Surgical Hospitals

अणितस्य प्रथममेवागारमन्विच्छेत् ; तच्चागारं प्रशस्तवास्त्वादिकं कार्यम् । प्रशस्तवास्तुनि यः
शुचावतपवर्जिते । निवाते न च रोगाः स्युः शरीरागन्तुमानसाः ।

सु. सु. १९, ३-४

"One suffering from wounds should be first taken to the surgical ward, and that ward should be built according to the rules of the architectural science. In a ward built thuswise, which is auspicious, clean and protected from the sun and the wind one is free from diseases—psychic or somatic or diseases caused by external factors".

अतोऽन्य-मं कर्म चिकीर्षता वैद्येन पूर्वमेवोपकल्पयितव्यानि भवन्ति तद्यथा—यन्त्रशस्त्रक्षाराग्नि-
शलाकाग्निजलौकालावृजाम्बुषोष्पितुप्रोतसूत्रपट्टमधुपुतवसापयस्तैलतर्पणकषायालेपनकल्हव्यवनशीतोष्णोदककटा-
हादीनि, परिकर्मिणश्च स्निग्धाः स्थिरा बलवन्तः ।

सु. सु. ५, ६

“The physician desiring to perform any of the surgical measures should keep in readiness beforehand the following appurtenances viz., appliances, instruments, caustic alkalies, fire, probes, horns, leeches, sucking gourd, Jambavausṭha, swabs, suturing thread, leaves, bandages, honey, ghee, fat, milk, oil, soothing lotions, ointment, paste, fan, cold and hot water, basin etc., and attendants who are affectionate, steadfast and strong”.

इदानीं तावत्संभारान्विविधानपि समासेनोपदेक्ष्यामः; तद्यथा—दृढं निवातं प्रवातैकदेशं लुखप्रविचार-
मनुपत्यकं धूसातपजलरजसामनभिगमनीयमनिष्टानां च शब्दस्पर्शरसरूपगन्धानां सोदपानोल्लूखलमुसलवर्षःस्थान-
रनानभूमिमहानपं वाऽभुविद्याकुशलः प्रशस्तं गृहमेव तावत्पूर्वमुपकल्पयेत् । च. सू. १५, ६

“Here, therefore, we shall instruct in brief concerning several accessories. It is thus. The expert architect should first design a good house which is strong and is warding off the wind except on one side, affording comfortable moving space, not surrounded by high places, not penetrable to smoke, heat, moisture, dust and to undesirable noise, contact, taste, sights and odour and is furnished with a water-storage room, pharmacy room, latrine, bath room and kitchen”.

गीतवादित्रोल्लापकश्लोकपात्याख्याधिकेतिहासपुराणकुशलानभिप्रायज्ञाननुमतांश्च देशकालविदः
पारिषदांश्च । च. सू. १५, ७

“Those who are well-versed in singing, playing of musical instruments, panegyrics, verses, stories, legends, modern history, mythology, who are quick in understanding, who are of approved character, who are versed in the knowledge of clime and season and who are good members of society”.

चन्दनोदकशीतेषु ऋते धारागृहेऽपि वा ।

द्विसामुचिते सद्ने दाहार्तः संवशेःसुखम् ॥

च. नि. ३-२६१

“The fever-patient afflicted with a sensation of burning should lie down at ease in a specially constructed water cooled chamber or an apartment cooled by frequent spraying of ice-cold water or cold sandal-water”.

धारागृहं भूमिगृहं सुशीतं, वनं च रम्बं जलवातशीतम् ।

वेद्वर्यमुष्णमणिभाजनानां, स्पर्शाश्च दाहे शिशिराम्बुशीताः ॥

च. नि. ४-१०६

“Apartments with arrangement for shower bath, cold underground chambers, resort to pleasant woods cooled by moist breezes, the application of vessels inlaid with azure, pearls and precious stones made cool by putting cold water in them”.

शयनाच्छादनैरुष्णैरुष्णैश्चान्तर्गृहैः सुखैः ।

मारुतः प्रबलः शीघ्रं प्रशाम्यति मदास्थयः ॥

च. वि. २४. १३५

“By the warmth of the bed and the cover and the warmth of happiness and cheer of the interior apartments, alcoholism of the Vāta-type gets subdued effectively”.

तोयदानां च शब्दा हि शमयन्ति मदास्थयम् ।

जलयन्त्राभिवर्षाणि वातयन्त्रवहानि च ॥

कल्पनीयानि भिषजा दाहे धारागृहाणि च ।

फलिनीसेव्यलोध्रारुहेमपत्रं कुटञ्जटम् ॥

च. वि. २४, १५८-१५९

“The rumblings of thunder alleviate the effects of intoxication. Various devices of showering water and blowing breezes, and rooms equipped with cascades, should be devised by the physician for the cure of burning due to alcoholism. (The body should be painted) with perfumed cherry, cuscus grass, lodh, fragrant sticky mallow, fragrant poon, cinnamon leaves and nut-grass”.

Military Hospitals

स्कन्धावारे च महति राजगेहादनन्तरम् ।

भवेत्सन्निहितो वैद्यः सर्वोपकरणान्वितः ॥

तत्रस्थमेतं श्वज्ववशः शयतिसमुच्छ्रितम् ।

उपसर्पन्त्यमोहेन विषशल्यामयादिताः ॥

स्वतन्त्रकुशलंऽप्येषु शास्त्रार्थेष्ववहितः ।

वैद्यो ध्वज ईवाभाति नृपतद्विद्यपूजितः ॥

सु. सु. ३४, १२-१४

“In a big encampment just after the tent of the king, the physician should be kept present, fully equipped.

The persons afflicted with poison, darts and disease approach

him there without making a mistake—him who stays there being singled out by his flag, fame and name.

The physician who is an adept in his own art and is conversant with other sciences, being honored by the king and experts, looks prominent like a flag."

Mental Hospitals

सर्पेणोद्धृतवष्ट्रेण दान्तैः सिंहैर्गजैश्च तदा ।

त्रासयेच्छस्त्रहस्तैर्वा तस्करैः शत्रुभिस्तथा ॥

च. वि. ९, ८३.

"Thus he may also be terrorised by means of snakes whose fangs have been removed, or by trained lions and elephants or by men dressed as bandits or foemen with weapons in their hands".

कशाभिस्ताडयित्वा वा सुबद्धं विजने गृहे ।

रुन्ध्य चेतो हि निभ्रान्ते ब्रजत्यस्य तथा शमम् ॥

च. वि. ९, ८१

"Or having scourged him with light whips, he may be left well secured with ropes in solitary confinement. From such drastic measures, the disorientated mind of the man is restored to normality".

यः सक्तोऽचिनये पट्टैः संयम्य सुरढः सुखैः ।

अपेउलोहकाष्टाद्ये संरोध्यश्च तमोगृहे ॥

च. वि. ९, ३०

"If the patient continues to behave in an irresponsible manner then he should be made soft by soft but strong bandages and put in a dark room free from metallic and wooden articles (lest he should harm himself with these).

Obstetric Hospitals

प्राक् चैवास्या नवमन्मामात् सूतिकागारं कारयेदपद्धतास्थिशर्कराकपाळे देशे प्रशस्तरूपरसगन्धायां भूमौ प्राग्द्वारमुदग्द्वारं वा चैरवानां काष्ठानां तैन्दुहैर्दुकानां भालातकानां वारणानां खादिराणां वा; यानि चान्यान्यपि ब्राह्मणाः शोभेयुरथर्ववेदविदस्तेषां; वसनालेपनाच्छादनापिधानसंपदुपेतं वास्तुविद्याद्वययोगाभिसल्लिख्यं सुखलवर्चःस्थानस्नानभूमिमहानसमृत्तुमुखं च ॥

च. शा. ८, ३३

"Before the commencement of the ninth month, the physician should get erected a lying-in room on a site free from bones, sands

and broken bits of earthen vessels, in a soil which is excellent with regard to color, taste and savour, facing east or north, with the wood of bael, false mangosteen, putramjiva, marking nut, three leaved caper and catechu or with any other wood which the brahmans who are knowers of the Atharvaveda recommend. This should be well-built, well-plastered and well-furnished with doors and windows and in accordance with the principles of architecture; there should be arrangements for a fire-place, water-storage, pounding, lavatory, bath-room and kitchen, and it should be comfortable in that particular season".

तत्र सर्पिस्तैलमधुसैन्धवसौवर्चलकालविडलवणविडङ्गकुष्ठकिलिमनागरपिप्पलीपिप्पलीमूलहस्तिपिप्पलीमण्डूकपर्ण्यैलाङ्गुलीवचाचण्यचित्रकचिरबिल्वहिङ्गुसर्पपलशुनकतककणकणिकानीपातसीबल्वजभूर्जकुलस्थमैरेयसुरा - सवाः सन्निहिताः स्युः, तथाऽश्मानौ द्वौ, द्वे कुण्डमुसले, द्वे लङ्खले, खरवृषभश्च, द्वौ च तीक्ष्णो सूक्ष्मपिप्पलीकौ सौवर्णराजतौ, शस्त्राणि च तीक्ष्णायसनि, द्वौ च बिल्वमयौ पर्यङ्कौ, तैन्दुकैर्द्वादनि च कृष्ण-यस्मिन्धुक्ष्णानि, क्षियश्च बहुयो बहुगः प्रजाताः सौहार्दयुक्ताः सततमसुरक्ताः प्रदक्षिणाचाराः प्रतिपत्तिकुशलाः पशुकृतेवत्सलास्त्यक्-विषादाः क्लेशसहिन्योऽभिमतः, ब्राह्मणाश्चाथर्ववेदविदः; यचान्यच्च ब्राह्मणा ब्रूयुः क्षियश्च वृद्धास्तत् कार्यम् ॥

च. शा. ८, ३४

"The following articles should be kept there ready to hand—ghee, honey, rock-salt, sanchal black and bid salts, embelia, costus, deodar, ginger, long pepper, the roots of long pepper, the elephant pepper, Indian penny wort, cardamoms, glory lily, sweet flag, piper chaba, white-flowered lead-wort, asafetida, rape seed, garlic, clearing nut, kana, kanikā, cadamba, linseed, balvaja, birch, black gram and maireya and sura wines. Similarly, two grinding stones, two heavy pestles, two wooden mortars, an untamed bull, two gold or silver cases for keeping sharp needles, sharp metallic instruments, two bed-steads made of bael wood and faggots of false mangosteens and zachum oil plants, for kindling fire. The female attendants should be numerous, being mothers of many children, sympathetic, constantly affectionate, of agreeable behaviour, resourceful, naturally kind-hearted, cheerful and tolerant of hardships. There should also be present Brāhmanas who are knowers of the Atharvaveda. Whatever else is thought to be necessary should be kept; also whatever else the Brāhmanas and old dames advise, should be carried out'.

अष्टहस्तयतं चारु चतुर्हस्तविकालकम् ।

प्राचीद्वारसुद्वारं विदध्यात् सुतिकागृहम् ॥

भा. प्र. २

चतस्रोऽशङ्कुनीयाश्च सावने कुशला हिताः ।

वृद्धाः परिचरेयुस्ताः सम्यक् लिङ्गनखाः स्त्रियः ॥

भा. प्र. २

"The labour ward must be eight cubits long and four cubits broad and attractively built, with the entrance facing the east or the north. The patient should be attended by four women who are trustworthy, expert in obstetrics, well disposed, aged and who have clipped their finger-nails close".

अतोऽनन्तरं कुमारगारविधिमनुष्याख्यास्यामः—वास्तुविद्याकुशलः प्रशस्तं रम्यमतमस्कं निवातं प्रवातैकदेशं दृढमवगतश्चापदपयुर्दक्षिणैषिकपतङ्गं सुविभक्तलिलल्लखलमूत्रवर्चःस्थानस्नानभूमिमहानसप्तसुखं यथ-
तुंशयनासनास्तरणस्तं पञ्चं कुर्यात् ; तथा सुविहितरक्षाविधानवलिमङ्गलदोमप्रायश्चित्तं शुचिवृद्धवैद्यानुरक्तजनसंपूर्णम् ।
इति कुमारगारविधिः ॥

च. शा. ८, ५९

"We shall now describe the procedure with regard to the construction of the nursery. A skilful architect should build and furnish the nursery. It should be excellent, beautiful, well-lighted, sheltered from draught, admitting of air from only one direction, strong, free from such pests as marauding beasts, animals, fanged creatures, mice and moths, well-planned as regards the places of water-storage, grinding, lavatory, bath and cooking, comfortable during all seasons, and provided with beds, seats and spreads suited to each season. Moreover the rites connected with protecting the house from the influence of evil spirits as also those with propitiatory, auspicious, sacrificial and penitential offerings should be performed and the house should be filled with clean and experienced physicians and with those attached to the family. Thus has been described the procedure with regard to the construction of the nursery".

Besides these we have descriptions about purgatoriums or recreating homes where the quinary purificatory procedures (पञ्चकर्मविधि) viz., वसन, विरेचन etc., were undergone. Then there were स्वेदनगृह or sudatoriums and also health-homes.

कुटीप्रावेशिहस्याशौ विधिः सुमुपदेक्ष्यते ।

नृपवैद्यद्विजातीनां साधूनां पुण्यकर्मणाम् ॥

निवासे निर्मये शस्ते प्राण्योपकरणे पुरे ।
 दिशि पूर्वोत्तरस्यां च सुसुमौ कारयेत् कुटीम् ॥
 विस्तारोत्सेधसंपन्नां त्रिगर्भां सूक्ष्मलोचनाम् ।
 घनभिच्छिन्नुसुखां सुस्पष्टां मनसः प्रियाम् ॥
 शब्दाधीनामशस्तानामगम्यां स्त्रीविवर्जिताम् ।
 इष्टोपकरणोपेतां सज्जैर्द्यौषधद्विजात् ॥

च. चि. १, १/१७-२०

“We shall set down the procedure regarding the immature therapy. In an area resided in by princes, physicians, the twice-born communities, saintly men and men of virtuous deeds, free from alarm, salubrious, close to a city, where the necessary appurtenances may be had, one should, having selected a good site, cause a retreat to be built with its face towards either the east or the north. It should be of the following description:—high roofed and commodious; built in three concentric courts; furnished with narrow ventilator; thick walled; congenial in all weathers; well lighted; pleasing to the mind; proof against noises and other disturbing agents; untenanted by women; equipped with all the requisite appurtenances; and having physicians, medicines and Brāhmaṇas ready at call ”.

From the descriptions given above, it becomes evident that particular care was taken in selecting the site for hospitals, a site which gave protection from excessive wind, irritating noise, and dust, and uncomfortable light. Even the modern hospitals have something to learn from this ancient institution, especially with regard to precaution against irritating sounds.

The building too was constructed under the supervision of expert structural engineers (वास्तुविद्याविशारदाः) who were clever at the arrangement and division of apartments (स्थानविभागविदः).

Although the original conception of hospital construction was of an aristocratic type, it was modified according to needs.

A striking feature in this picture of ancient hospitals is the seasonal consideration. Arrangements were made so as to keep the rooms cool in summer and warm in the cold season. The methods

employed then may seem crude to the world accustomed to air-conditioning, but they were the rudiments of ideal construction and the indigenous ways of achieving the desired result, astonish us. There were special places for the voidance of urine and feces and bath-rooms were provided. The standard of cleanliness achieved was very high.

प्रशस्तवास्तुनि गृहे शुचावातवर्जिते ।

निवाते न च रोगाः स्युः शरीरागन्तुमानसाः ॥

सु. सू. १९, ४

सदा नीचनखरोम्णा शुविना शुक्लवापसा शान्तिमङ्गलदेवताब्राह्मणगुरुपरेण भवितव्यमिति ।

सु. सू. १९, २३

"In a ward built thuswise, which is auspicious, clean and protected from the sun and the wind, one is free from diseases—psychic or somatic or diseases caused by external factors.

The patient should be always clean, with close clipped finger nails, wearing white raiment and devoted to the auspicious rites of Śānti and Maṅgala and to honoring the gods, the Brāhmaṇas and elders".

The hospitals were well equipped with various devices and instruments. A list of some of these Yantras is given below.

यन्त्राणि

हस्तमेव प्रधानतमं यन्त्राणाम्

[यस्माद्वेदे यन्त्राणामप्रवृत्तिः]

१	२	३	४	५	६
२४ स्वस्तिकयन्त्राणि	२ संदंशयन्त्रे	२ तालयन्त्रे	२० नाडीयन्त्राणि	२८ शलाकायन्त्राणि	२५ उपयन्त्राणि
[अष्टादशाङ्गुल-	षोडशाङ्गुलौ	द्वादशाङ्गुले	अनेकप्रकाराणि	नानाप्रकाराणि	१ रज्जु-
प्रमाणानि मसूराकृतिभिः त्वङ्गाससिरा-	कर्णनासानाडी-	अनेकप्रयोजनानि	नानाप्रयोजनानि		२ वेणिका-
कीलेः अश्वद्वानि	स्नायुगतशल्यो-	शल्याहरणार्थम्	एकतोमुखानि	यथायोगपरिणाद-	३ पट्ट-
मूलेऽङ्गुलवदावृत्त-	हरणार्थम्	मस्त्यतालवत्	उभयतोमुखानि	दीर्घाणि	४ चर्मन्ति-
वारङ्गाणि]	संदंशः	(१) एकताल-	स्रोतोगतशल्यो-	गण्डपद-	५ वल्कल-
अस्थिविष्टशल्य-	१ उनिग्रहः	(२) द्वितालके	हरणार्थम्	सर्पफण-	६ लता-

१	२	३	४	५	६
उद्धरणार्थम्	२ अनिग्रहः	रोगदर्शनार्थम्	शरपुङ्ख-	७ वस्त्र-	
व्यालमृगमुखमुखानि		आचूषणार्थम्	वक्षिशमुत्रे [द्वे द्वे]	८ अष्टीलाहम्-	
१ विह-		क्रियासौकर्यार्थम्	[एषण- (८)	९ मुद्गम्-	
२ व्याघ्र-		स्रोतोद्वारपरिणाहानि	व्यूहन-	१० पाणतल-	
३ वृक-		यथायोगदीर्घाणि	चालन-	११ पादतल-	
४ तरङ्ग-		(१) भगन्दर-	आहरणार्थम्]	१२ अङ्गुलि-	
५ ऋक्ष-		{ १ एकच्छिद्रम् }	मसुरदलमात्रमुखे	१३ जिह्वा-	
६ द्वीपि-		{ ॥ द्विच्छिद्रम् }	द्वे (२)	१४ दन्त-	
७ मात्रार्-		(२) अशौ-	[किंचिदानताप्रे	१५ नख-	
८ शृगाल-		{ १ एकच्छिद्रम् }	स्रोतोगतशल्लो-	१६ मुख-	
९ मृगैर्वारुमुख-		{ ॥ द्विच्छिद्रम् }	द्वरणार्थम्]	१७ बाल-	
मुखानि		(३) त्रण-	कार्पासकृतोष्णी-	१८ अक्षकटक-	
		(४) बस्ति-	षाणि (६)	१९ शाखा-	
		(५) उत्तरबस्ति-	[प्रसार्जनक्रियासु]	२० श्रोत्र-	
		{ १ पुंसां }	दर्व्याकृतीनि	२१ प्रवाहण-	
पक्षीमुखमुखानि		{ ॥ स्त्रीणां }	खल्लमुखानि (३)	२२ हर्ष-	
१ काक-		(६) मूत्रवृद्धि	[क्षारौषधप्रणि-	२३ अयस्कान्त-	
२ कंकु-		(७) दकोदर	धानार्थम्]	मयानि	
३ कुरर-		(८) धूम-	जाम्बववदनानि (३)	उपयन्त्राणि	
४ चास-		{ १ वैरेखनिकम् }	अङ्गुशवदनानि (३)	२४ क्षार-	
५ भास-		{ ॥ स्नेहिकम् }		२५ अग्नि-	
६ शशघाती-		{ ॥ प्रायोगिकम् }	[षडेव-अग्निर्कर्मसु-	मेघज	
७ उलूक-		(९) निरुद्धप्रकम्प-	अभिप्रेतानि]		
८ चिल्लि-		(१०) सन्निरुद्धगुद-	कोलास्थिदलमात्र-		
९ श्येन-		(११) अलावू-	मुखम्-खल्लतीक्ष्णौष्ठम् (१)		
१० गृध्र-		(१२) शृङ्ग-	[नासारुद्धहरणार्थम्]		
११ क्रोश-		यन्त्राणि	कलायपरिमण्डलम्		
१२ भृङ्गराज			उभयतो मुकुलाग्रम् (१)		
१३ अञ्जलिकर्ण			[अञ्जनार्थम्]		
१४ अवभञ्जन-			मालतीपुष्पवृन्ताग्र-		
१५ नन्दीमुख-			प्रमाणपरिमण्डलम् (१)		
मुखानि			[मूत्रमार्गविक्षोभनार्थम्]		

यन्त्रकर्मणि

- | | | |
|--|--|---|
| १. निर्धातनम्-विचाल्यनिर्द्धारणम्
(घटनम्) | ९. पीडनम्-त्रणस्य | १७. उन्मथम्-प्रनष्टस्य शल्यस्य मार्गे
शलाकादिभिरालोढनम् |
| २. पूरणम्-वस्तिनेत्रप्रसृतिभिस्तै-
लादिना | १०. मार्गविशोवनम् | १८. आचूषणम्-विषदुष्टस्तन्यरुधिरे-
षु शुद्धालावृभ्यां मुखेन वा। |
| ३. बन्धनम्-रज्ज्वादिना | ११. विकर्षणम्-विगृह्य कर्षणम्
(प्रतिबद्धशल्यस्य मोचनम्) | १९. एषणम्-गण्डरुदमुखेन गतित्रणो-
त्सङ्गशल्योदीनाम्। |
| ४. व्यूहनम्-ऊर्ध्वीकरणम् | १२. आहरणम्-आनयनम् | २०. दारणम्-द्विधाकरणम् |
| ५. वर्त्तनम्-विस्तृतस्य वर्तुलीकरणम् | १३. आच्छतम्-ईषन्मुखानयनम् | २१. ऋजूकरणम्-कुटिलशल्यस्य |
| ६. चालनम्-स्थानात् स्थानान्तरणम्-
नम् (शल्यकम्पनम्-अन्धे) | १४. उन्नमनम्-अधःस्थितस्य
ऊर्ध्वनयनम् | २२. प्रक्षालनम्-तोषादिभिः |
| ७. विवर्तनम्-कर्णवायोर्निष्कासयितु-
मिष्टस्य कर्णलग्नस्य पुनर्निवर्तनम्
(यन्त्रस्य आभणमन्तरे वा) | १५. विनमनम्-निम्नी (नखी)-
करणम् | २३. प्रधमनम्-नाच्या चूर्णक्षेपणम् |
| ८. विवरणम्-प्रकाशनम् (प्रसारणम्) | १६. भञ्जनम्-आमर्दनम्, सम-
न्ततो मर्दनम् | २४. प्रमार्जनम्-प्रोच्छनम् |

That the hospitals were primarily meant for the diseased need not be reiterated, but some departments of the general hospitals or hospitals specializing in certain branches, like purgatoriums were frequented by healthy persons also thrice a year to undergo the course of purgative, revirilification and rejuvenation.

तस्यां संशोधनैः शुद्धः सुखी जातबलः पुनः।

रसायनं प्रयुज्जीत तत्प्रवक्ष्यामि शोधनम् ॥२४॥

च. नि. १, (१) २४

"Therein (in the retreat constructed) being cleansed with the purificatory measures and on having regained his happiness and normal strength, he should undergo the vitalization procedure. We shall first describe the cleansing procedure."

A few quotations will throw an interesting side-light on the beds, its accessories, cleanliness and decorations of the rooms.

तस्मिन् शयनमसंवाधं स्वास्तीर्णं मनोज्ञं प्राक्शिरस्कं सशङ्खं च कुर्वीत ॥

सु. सु. १९, ५

सुखचेष्टाप्रचारः स्यात् स्वास्तीर्णे शयने व्रणी।

प्राच्यां दिशि स्थिता देवास्तार्जुनार्थं च तच्छिरः ॥६॥

सु. सु. १९, ६

तस्मिन् सुहृद्भिस्तुक्लैः प्रियंवदैरुपास्यमानो यथेष्टमासीत् ॥

उ. सू. १९, ७

"The ward must be equipped with beds that are free from discomfort and well spread with a cloth and with its head towards the east, and with instruments kept ready. *** The surgical patient feels comfortable in his movements if the bed is well made and spread with a cloth. The gods have their dwelling in the east and hence his head should lie towards the east as a sign of obeisance. *** There he should lie freely attended by friends who are amiable and pleasant-spoken".

Clothes etc.

उदा नीचनखरोम्णा शुचिना शुक्लवाससा शान्तिमङ्गलदेवताब्राह्मणगुरुपरेण भवितव्यमिति

उ. सू. १९, २३

"The patient should be always clean, with close-clipped finger nails, wearing white raiment and devoted to the auspicious rites of Śānti and Maṅgala, and to honoring the gods, the Brāhmaṇas and the elders".

Room Decoration

तस्मात्सततमत्तन्त्रितो जनपरिचृतो नित्यं वीथोदकशङ्खचपदामपुष्पलाजाद्यलङ्किते वेश्मनि संपन्नमङ्गलमनो
स्तुक्लाः कथाः शृण्वन्मासीत् ।

उ. सू. १९, २५

"The patient should stay keeping himself constantly vigilant, surrounded by men and in a house adorned with lamps, water-pots, instruments (arms), flower garlands, loose flowers and roasted paddy and he should engage himself in listening to attractive, auspicious and cheering stories."

Great care was taken in prescribing the diet. Weekly regimen containing the items of each meal was carefully prescribed.

The convalescence stage was given great importance and the process of संचर्जन or rehabilitation was carefully undergone.

अथ खल्वातुरं वैद्यः संशुद्धं वमनादिभिः ।

दुर्बलं कृशमल्पाग्निं मुक्तसंधानबन्धनम् ॥

निर्हृतानिलकिम्बूत्रकफपित्तं कृशाशयम् ।

शून्यदेहं प्रतीकारासहिष्णुं परिपालयेत् ॥
 यथाऽण्डं तरुणं पूर्णं तैलपात्रं यथैव च ।
 गोपाल इव दण्डी गाः सर्वस्वादपचारतः ॥
 अग्निन्धुक्षणार्थं तु पूर्वं पेयादिना भिषक् ।
 रसोत्तरणोपचरेन् क्रमेण क्रमरोविदः ॥
 स्निग्धान्स्निग्धानि ततोऽप्लवणौ रसौ ।
 श्वदुतिक्रान्ते ततो भूयः कषायकटुः ततः ॥
 अन्यऽप्यप्रत्यनीकानां रसानां स्निग्धरुक्षयोः ।
 व्यत्यासादुपक्रमेण प्रकृतिं गमयेद्विषक् ॥
 सर्वज्ञो ह्यसंपन्नो रतियुक्तः स्थिरान्द्रियः ।
 बभ्रान् सत्त्वसंपन्नो विज्ञेयः प्रकृतिं गतः ॥

च. धि. १२, ३-९

“When after being duly purified by the procedures of emesis etc., the patient is in a debilitated condition, emaciated, weakened in his digestive power, has his joints loosened, is purged of the morbid accumulations of flatus, urine, mucus and bile, the stomach and the intestines have become contracted, the body has become vacuous and accordingly unable to bear any further strain, he should be protected by the physician from all kinds of risk, just as a tender egg is protected or a vessel brimful of oil, or the kine by the cowherd armed with staff.

The physician who is conversant with the order and sequence of therapeutic procedures, should put the patient on a liquid diet beginning with thin gruel and leading upto meat-juices for the purpose of re-stimulating his gastric fire.

To this end, he should prescribe the use first of unctuous, acid, sweet and pleasant articles, then of articles of acid and salt tastes, and later, of sweet and bitter tastes, and last of all articles of astringent and pungent tastes. In this manner by the use of two antagonistic tastes at a time, and by the alternate use of unctuous and dry articles, the physician should restore the patient to his normal health.

When the patient is able to tolerate all the tastes, when there is no retention of excretory matter, when the zest for life

has returned, the sense-organs have regained their firmness, when strength has returned and the mind is fully composed, it should be known that he is restored to normality'.

In the last of the above-quoted verses the attainment of the 'normal' is defined. A patient could be discharged only when he was completely rehabilitated and attained the normal condition. The procedure of discharging a patient as given in Caraka is very interesting.

बलवर्गोपपन्नं चैनमनुपहतमनश्नभिसमीक्ष्य सुप्रजीर्णभक्तं शिरःस्नातनतुलितगात्रं सन्दिग्धमनुपह-
तवस्त्रसंवीतमनुरुपालङ्कारालङ्कृतं सुहृदां दर्शयित्वा ज्ञातीनां दर्शयेत्, अर्थनं कामेष्ववसृजेत् च. सू. १५.१७

“ On finding that he has regained his vitality, complexion and cheerfulness of mind, and after he has slept happily, digested his food well, taken a full bath and painted the body with sandal, has put on garlands and untorn clothes and has adorned himself with befitting ornaments, he should be shown round to his kinsmen after being presented to his friends. Thenceforward, he should be left to resume his normal activities”.

From what has been cited above we find that there were certain salient features in the institution which conferred individuality on it and which may well be copied by our modern institutions. We find that Psychic therapy was offered to the patient and health preservation was given equal importance with disease-curing. As a matter of fact Āyurveda has always laid more stress on prevention than cure and accordingly prophylactic and preventive hospital work was more emphasised. Friends and other people relieved the patient of the tedium of hospital life by lively conversation and story-telling. Absolute cleanliness was observed and caste distinction so far as hospital treatment was concerned was an unknown thing. Any one from a Brāhmaṇa to a Śūdra was admitted without distinction or favouritism. The hospitals were primarily run for the benefit of the poor people who could not afford the luxury of a private physician or the sometimes costly treatment. The hospitals were fully equipped with all the known appurtenances and apparatuses and young

physicians, with a progressive spirit and selfless devotion to alleviating the miseries of the suffering mankind were engaged.

The construction of a hospital was considered to be an act bestowing great merit on the donor. We find that some hospitals were so huge as to admit hundreds of patients.

The standard of medical attainment required in the doctors was very high and day and night attendance was provided for the patients.

The standard of cleanliness was so high that even visitors were required to put on a clean garment while entering the hospital. Kings took great interest in the inspection of hospitals, and personal talk with the patients four times a month was a matter of his routine.

From Mahāvamśa we gather that villages were endowed for the maintenance and efficient running of the hospital and its staff. The hospitals were not only the refuge of the diseased alone. Pregnant women, blind invalid and aged persons also were looked after in the hospitals.

The high degree of specialization in hospital work, the special features like refrigeration and other amenities of hospital life, the absence of caste distinction, the greater emphasis on prevention, the scrupulous and fastidious observance of cleanliness, the size of the institutions, the quality of the personnel employed, day and night attendance, efficient management and maintenance, all these really astonish us and make us think with admiration of those days when India gave the lead to the world in all those aspects of civilization which we are often erroneously led to ascribe to the West and to the modern age.

CHAPTER IX

PHARMACY

Pharmacy and Pharmaceutics form a very important and substantial part of medicine. As the proverb goes, the proof of the pudding is in the eating and the efficacy of the medical science depends in a large measure on the nature of the medications administered. The richness of the medical advancement therefore has to be judged

largely by the richness in the variety as well as the quality of the pharmacopia and pharmacy.

1. Vedic period

Veda is spoken of as having six limbs, viz., phonetics, grammar, etymology, astrology, canons of ritual and prosody.

वेदाङ्गानि षडेतानि शिक्षा व्याकरणं तथा ।

निरुक्तं ज्योतिषं कल्पः छन्दो विचित्ररोत्यपि ॥

Out of these, कल्प or the canons of ritual is defined as क्रमं क्रमे प्रयोगाणां कल्पं तत्र प्रचक्षते i. e. the order of rituals is spoken of as Kalpa.

Āyurveda was considered to be on a par with the Vedas; and as in the Vedas. we get a section on Kalpa (कल्प) in Āyurveda too, Kalpa meaning the canons of pharmaceutics.

In Vedic period we find that single herbs are prescribed. They also prescribed minerals and animal substances, but the prescriptions were not compound. This is the pre-historic period. At that time simple prescriptions were the order of the day throughout the world. It is probable that magic and black art were practised to some extent in the Miśra Deśa (Egypt) which is called the Śyāma, Śyāva or the black country. It is likely that the word Śyāma might be the origin of the words kimia, alchemy and chemistry. The secret prescription for the preservation of mummies is an instance to prove their advanced knowledge in chemical pharmacy. We are getting more and more enlightenment on Mohenjo-daro and from the findings that have come to light we learn that Śilājī (mineral pitch) and other drugs have been found there even after thousands of years of oblivion. This definitely shows that this special branch of knowledge had developed in India also.

The art of preserving dead bodies was not unknown in ancient India. In Rāmāyaṇa, Ayodhyā-kāṇḍa, we find that the corpse of king Daśaratha was preserved in medicated oil. In Viṣṇu Purāṇa we find that the corpse of Nimi was preserved by being embalmed with fragrant oils and resins.

In Kāśī-khaṇḍa, there is the description of the corpse of a Brāhman's mother being preserved in the following manner. The corpse was washed and then embalmed in यक्षकर्म, i. e. specially medicated balm and enveloped severally with Netra-vastra (flowered muslin), silk cotton, coloured cloth and Nepalese blanketing. The corpse was conveyed in a copper coffin from Rāmeśwara to Kāśī.

2. The golden period of Āyurveda, 600 B. C. to 600 A. D.

Pharmacy had reached the scientific stage at this period, as is evinced by the master-classics of Caraka and Suśruta. They evolved the all-comprehensive concept. Caraka declares:—

नानौषधिभूतं जगति किञ्चिद् द्रव्यमुपलभ्यते ।

च. सू. २६, १२

“There is no substance in the world which is not medicine”.

They knew the uses of practically all the known substances, as is proved by the enumeration in the following verses.

“ Again they are classified differently in three groups—animal, vegetable and mineral.

Honey, milk, bile, fat, marrow, blood, flesh, excrement, urine, skin, semen, bone-sinews, horns, nails, hooves, hair, down, and inspissated bile—these are the substances used in medicine from the animal world.

Gold, ores, the fine metals, sand, lime, red and yellow arsenic, gems, red ochre and antimony are the mineral products used in medicine.

The vegetable group is divided into four classes (the direct fruiters, creepers, flowery fruiters and herbs). Root, bark, pith, exudation, stalk, juice, sprouts, alkalies, milk, fruit, flower, ash, oils, thorns, leaves, buds, bulbs, and off-shoots are the plant products used in medicine.” (Caraka Sūtra I, 68-72)

In addition to these classifications, clear instructions were given regarding the kind of country, season and clime of culling of

herbs, selections of herbs and the methods of storage.

Regarding country, we have detailed descriptions in Caraka Kalpa I-8.

त्रिविधः खलु देशः—जङ्गलः, आनूपः, साधारणश्चेति ।

"Place or climate is of three kinds: Jāṅgala (arid) Land, wetland and ordinary land". Then follows a description of three kinds of land.

Regarding the season and time of culling the herbs we have in Caraka, Kalpa-sthāna I, 10. "Of them such drugs should be culled as were put forth in their proper season and have attained their fulness of growth, taste, potency and smell....." etc.

In this verse detailed descriptions are given as to how and when the herbs should be culled.

Minute instructions regarding the selection of drugs are given in Caraka Cikitsā-sthāna I, (1), 38-40.

"The best of habitats for medicinal plants is the Himālayas, the most majestic of mountains. It is the fruits grown in the Himālayas that are therefore to be properly culled every season, rich with juice and potency, mellowed by the sun, wind, shade and water, ungnawed at by bird or beast, unspoiled and unmarked with cuts or diseases. We shall now describe the modes of administration and the excellent effects of these fruits."

Very valuable instructions are given in Caraka Kalpa-sthāna I-11 regarding storage of herbs.

It says that the herbs should be stored in houses with doors opening to the east or the north, and that the rooms should be windless, proof against fire, water, moisture, smoke, dust, mice and quadruped.

In order to ascertain the action of the drugs on the human body, the great sages evolved the five determinants viz., taste (रस), quality (गुण), potency (वीर्य), post-digestive effect (विपाक) and specific action (प्रभाव).

This system enabled them to study completely all the drugs necessary for therapeutics. These drugs were chiefly administered through the natural channel of the mouth and hence the arrangement of Rasa or tastes came into prominence, the sense of taste playing an important part in oral administration of drugs. This arrangement and metaphysic of taste in six categories is a speciality of Āyurveda and it has been so arranged as to fit well arithmetically to the Tridoṣa theory. The properties and actions of inedible drugs were experienced by senses other than that of taste and so a comprehensive scheme of twenty or more kinds of properties was evolved which could be tested by other sense-organs. Some drugs acted more powerfully than usually expected and so *वीर्य* or potency of drug became one of the determining factors. Another peculiarity of Āyurveda is its theory that the drugs while entering the body submit themselves to the process of digestion. As a background of this theory, the concept of Āyurveda that diet and drugs fall in the same category is worthy of attention. The Upaniṣads consider food also as medicine (*अन्नं भेषजम्*). The difference between diet and drugs is not fundamental; taste is predominant in diet (*रसविशेष*) while potency is predominant in drugs (*वीर्यविशेष*), and it is but a natural corollary that just as diet gets digested in the system, so drug also is digested in the system. It is on this sound fundamental theory that Āyurveda forbids the administration of another drug before the first drug is digested. Thus comes *विपाक* or post-digestive effect, the form that a drug is turned into after being digested and its action on the body; these form the subject matter of *विपाकज्ञान*. Last but not the least comes the specific action (*प्रभाव*) of a drug. Even in this modern scientific age, not to talk of the so-called empirical age of knowledge, no scientific explanation can be given for the specific properties of certain drugs, because they are beyond the ken of the present stage of science. When the knowledge of specific action attains perfection, there will be no need of research but so long as there is room for research, we must admit that the knowledge is incomplete.

These five-fold deliberations on drugs cover the whole field in a comprehensive way. As Āyurveda has conceived diet and drug as one, the properties and the actions of the substances

that comprise our diet have been subjected to the same process of study and exposition as those of the drugs. This is really a speciality and peculiarity of Āyurveda.

The Varieties of Preparations

Caraka in the first chapter of Kalpa-sthāna declares thus regarding the varieties of preparations:

“Taking into consideration that drugs differ with respect to land, season, source, flavour, taste, potency, post-digestive effect and specification and also that men differ with respect to their body, morbid tendency, constitution, age, vitality, gastric fire, proclivities, homologation and stage of disease, we shall here describe six hundred purgative preparations that are pleasant in their variety of smell, colour, taste and touch of drugs, although the extent of the possible preparations from these drugs is innumerable.” (Caraka, Kalpa 1, 1-6).

The various processes known to modern pharmacy are nearly all represented in the aphoristic list given by Caraka.

करणं पुनः स्वाभाविकानां द्रव्याणामभिर्बन्धकारः । संस्कारो हि गुणान्तराधानमुच्यते । ते गुणास्तोयाम्नि-
सन्निकर्षशौचमन्यनदेशकालवासनभावनादिभिः कालगर्भभाजनादिभिश्चाधीयन्ते ॥

च. क. १, २

“Preparation is the process performed to modify the natural properties of substances. That process again is that which modifies radically the properties of substances. This modification is brought about by dilution, application of heat, clarification, emulsification, storing, maturing, flavouring, impregnation, preservation and the material of receptacle.”

This shows that the art of pharmacy had reached a very high level in those days. The ten arts described by Śukrācārya comprise practically all the processes known to modern pharmacy.

A full-fledged culinary art could only be possible in India, and the works on स्रज्ञाज्ञ and पकज्ञाज्ञ (science of cooking) bear testimony to our statement. Even today, India would perhaps stand first in the world so far as the art of cooking is concerned.

The manufacture of sugar was a sort of monopoly in India. When the soldiers of Alexander saw sugar for the first time, they called it sweet chalk. Sugar began to be exported to the West in greater quantities after the twelfth century of the Christian era, but even then it was imported by those countries as a medicine and was available in the market at a very high price.

Thirdly the use of spices native to the tropical zone is a distinguishing feature of India. Cloves, cinnamon, cardamom, ginger, saffron etc. were more responsible for foreign invasions of India than any political or cultural motives of invasion. Italy, Arabia, Portugal, Holland and England fought wars, devised strategies and organized plunders to capture this trade of spices.

Fourthly the sense of smell in the oriental is more sensitive than that of the occidental and this has played no small part in the pharmaceutics of our country. Nature as well as human characteristics vary in different countries. The Himalayas produce more of sweet-smelling flora while the Alps abound in flora charming only to look at.

Fifthly a Vaidya always used to be the presiding officer of the royal kitchen.

These forces combined to evolve medicated food which was medicine and food in one. Besides, the practice of administering some medicine to princes and the aristocrats varying in accordance with their tastes and pursuits of pleasure, gained favour. The abundance of sugar resulted in devising of varied preparations of wine.

India was well conversant with the utility of salt Caraka enumerates 15 kinds of salt, such as सैन्धव, सौवर्चल, काल, विड, पाक्य, आनूप, कृष्य, वातुह, एल, सौलक, सामुद्र, रोमक, औद्धिद, औषर, पाट्यक and पांशुज. They prepared various kinds of alkalies and alkaline salts (क्षार) from vegetable, animal and mineral products.

The preparations of medicated Ghrita (घृत) were common in India in those days and even today it is a special feature of the Indian pharmacy. In addition to these special factors, the vastness

of the country, the variety of seasons, the progressive period of civilization, and the increase of pleasure pursuits etc, gave a great impetus to the progress of pharmacy.

The Field of Pharmacology

“And of that material this is the test: that it is of such and such nature, of such quality, of such efficacy, is born of such a season, gathered in such a manner, preserved in such a way, medicated thus, and in such dosage, administered in such and such a disease, to such a person, either eliminates or allays such and such a humor. And if there be any other administered medication in similar manner, should it also be examined.” (Caraka Vimāna VIII-87)

Caraka classifies medicine into two kinds:

मेषजं द्विविधं च तत्
स्वस्थस्योजस्करं किञ्चित् किञ्चिदातस्य रोगघ्नम् ।

च. चि. १-(१), ४

“Now medicine is of two kinds: one kind is promotive of vigour in the healthy, the other destructive of disease in the ailing.”

Thus the drugs are of two kinds; one that goes for positive health and the other belongs to the curative group. The group of drugs for positive health are sub-divided into two kinds.

स्वस्थस्योजस्करं यत्तत्तद् वृष्यं तद्रसायनम् ।

“One is (वृष्य) or the virilific and the other is (रसायन) or the vitalizer.”

On going through the description of these two processes, we are surprised to know how high the ideals and the practical life of men of those days were.

While explaining the word रसायन (Rasāyana), Ātreya describes the properties of a Rasāyana drug.

“Long life, heightened memory and intelligence, freedom from disease, youth, excellence of lustre, complexion and of voice, optimum strength of body and senses, utterances that always get

fulfilled, the reverence of people, body-glow, all these does a man obtain by the use of vitalizers. The vitalizers are so called because they help to replenish the vital fluids of health." (Caraka Cikitsā I, 7-8).

What a noble conception of health! The virilifics were used for the purpose of producing progeny of the highest calibre. Progeny was considered to be the preserver of the traditions of ideals and aspirations of men. The use of virilifics was recommended solely for this purpose. Moreover, they gave positive health, immunity against inroads of diseases and retarded aging.

These two superb concepts of Āyurveda were held in such a high esteem that these obtained recognition as two special branches of the octopartite Āyurveda.

Ātreya has classified the drugs into fifty classes according to their properties and each class contains ten drugs (Caraka Sūtra IV, 8) and this is the simplest, easiest and most systematic classification.

Among the four requisites for curing a disease, drugs occupy a place second only to the physician.

"The physician, the drugs, the attendant and the patient constitute the four basic factors of treatment". (Caraka Sūtra IX, 3).

Caraka enumerates the necessary qualifications of a good drug as under:—

"Abundance, applicability, usability in multifarious modes and richness of quality—these four are said to be the tetrad of desiderata in drugs". (Caraka Sūtra. IX, 7).

Drug action is fully described in Caraka. For instance in Caraka Saṃhitā Vimāna-athāna, chapter I, 16 we find concise but full description of long pepper (*पिप्पली*).

"Long pepper, pungent though in taste, is sweet in post-digestion, heavy, neither overmuch unctuous nor overmuch hot, is deliquescent and esteemed as medicine. It is at once productive of beneficial and baneful effects. If administered in the proper time and measure, its action is at once beneficial. But if continued for over a

long period, it results in morbid cumulative effect, as due to its heavy and deliquescent qualities it arouses Kapha. It aggravates Pitta on account of its hot property and is not able to allay Vāta because of its meagreness of unctuous and hot qualities. Nevertheless it makes a good vehicle. In view of these considerations long pepper should not be used in excess." (Vimāna I, 16).

Similar descriptions of salts and alkali are given. We find detailed actions and properties of various kinds of milk in Caraka Sūtra-sthāna chapter I, 105-113. A lengthy but apt description of actions of wines (मद्य) is given in Caraka Cikitsā-sthāna chapter XXIV, verses 29 to 73.

Speaking about the preparations as regards their properties and actions, Caraka says:

"That should be known as the proper medication which requires to be taken in small dose, which is quick in action and is curative of even an excessive degree of morbidity, which is easy to take, which is light in digestion, palatable, pleasing, curative of the particular disease, not harmful even if complications arise, not very depressant and is possessed of the most agreeable smell, color and taste." (Caraka, Siddhi sthāna, VI, 15-16)

The prescriptions of drugs were arranged in such a way as to contain the above qualities. The processes for these preparations were explained and rules for nomenclature of these preparations also were framed in order to bring about a certain uniformity. Rules were also framed regarding the use of drugs containing just the opposite properties in these preparations, if it was found necessary to add such a drug for the sake of taste, appearance or smell.

"It has been laid down that a compound preparation is named after the basic drug which forms its principal active ingredient.

In the prescription of a compound where the emetic nut etc., form the basic or principal drug, wines etc., occupy the secondary role as constituents, vehicles or excipients. They followed the main drug in the prescription, even as the attendants follow the king.

Even the antagonism of this potency does not vitally impair the main effects of the principal drugs, while admixture of drugs of similar potency intensifies its action.

As laid down, the use of articles that are of antagonistic potency to the disease is allowed for the purpose of imparting to the medication pleasant colour, taste, touch and odour suitable to the conditions of a disease'. (Caraka Kalpa. XII, 43-46)

In the modern method of writing a prescription the letter 'R', a symbol for 'recipe', is always found at the beginning. This sign or symbol is called superscription. As a matter of fact the symbol 'R' is the symbol of the planet 'Jupiter'. Āyurveda enjoins on the patient to chant some sacred hymn while taking the medicine. The sacred hymn as given in Caraka, Kalpa-sthāna I, 14 is as under:

ॐ ब्रह्मरक्षश्चिह्नं नन्दमूत्राकारं निलानलाः ।
 ऋषयः सौषधिप्रामा भूतसङ्घाश्च पान्दु ते ॥
 रसायनमिव वर्षाणां देवानाममृतं यथा ।
 सुधेवोत्तमनागानां भैषज्यमिदमस्तु ते ॥

It is better to use symbols rationally than blindly. The chanting of a hymn would seem ridiculous to us in this modern age, but we must probe behind the apparently absurd practice and try to find out the concept on which such a chant is based. This can be understood only if we study the other ideologies of the period.

Minuteness and singleness are the two qualities of mind. Mind cannot work at two places at a time. So one must concentrate on the work on hand, otherwise the work cannot be a success. On this reasoning the chanting of a hymn becomes helpful in transferring the attention of the mind busy in other affairs to concentrate on the medicinal dose. Therefore Ātreya says:-

विधुय मानसान्दोषान् कामादीनशुभोदयान् ।
 एकाग्रमनसा पीतं सम्यग्योगाय कल्पते ॥

च. सि. ६, १७

"If a person after cleansing his mind of its impurities like passion and other inauspicious sentiments and concentrating his mind

on the treatment, takes this dose, it brings about the most desirable results."

The second stage or step in a prescription is the writing of it; it consists of the basis or the chief ingredient, adjuvant and corrigent. The nomenclature of the prescriptions is based on the names of the chief ingredient followed by the word आदि or "and others" to suggest the compounding of other ingredients, e g. नागरादि चूर्ण. In English, 'Co', the shortened form of 'compound', is used for this e. g. 'Pulvis glycyrrhiza co'. This similarity in the nomenclature of prescriptions both in the East and the West show that science is one but ignorance can lead to manifold differences.

In therapeutics, the mere knowledge of the properties and actions of the drugs in the prescription is not the end in itself. Therapeutics is an art or more properly it is an artistic science. Caraka says:

"The art of prescription depends upon the knowledge of dosage and time, and on this art, in return, depends success; hence the skilful physician stands ever superior to those possessing merely a theoretical knowledge of drugs" (Caraka Sūtra, II, 16)

He further adds:

"Though treating with the right prescriptions, yet if the physician be ignorant of the knowledge of place etc, he cannot achieve success in treatment. There exist many differences in the nature of men as regards age, vitality, constitution etc." (Caraka Cikitsā XXX, 320)

The preparations should be made in accordance with the doses. We generally believe that standardization is the last word in modern medical science, but we must not forget that accuracy in measurement is the first step in scientific progress. "Logical reasons for everything and accuracy" was the motto of the scientific age of India which began about 600 B. C; and it is for this very love for accuracy that the science of logic (न्याय) and Sāṅkhya (संख्य) came to be written. In an age when even the sequence of words in a sentence was strictly regulated and the words could not be used without a definite purpose, the laxity in

accuracy of measurement is unthinkable. Let alone the accuracy and exact measure of medicinal doses, even food was to be taken in measured quantities. While narrating the principle of hygiene, the first chapter on the subject begins with "मात्राशी स्यात्" i. e. "you shall eat food in measured quantities." The word मात्रा is derived from मीयते अनेन i. e. 'by which it is measured,' while the English word 'dose' is derived from दा to give. The English word simply "gives" while the Sanskrit word "measures". This proves that accuracy in measuring is emphasized more in the Āyurvedic term.

A few quotations pertaining to this accuracy of measurements from various Āyurvedic treatises will not be out of place here.

मात्राशी स्यात् ।

च. सू. ५, ३

"You shall eat food in measured quantities."

मात्रामूलकं चिकित्सितम् ।

का. सं. वि. ३, १०१

"All treatment depends on dosage".

न मानेन विना युक्तिर्द्रव्याणां ज्ञायते क्वचित् ।

शा. प्र. १. १४

"There can be no compounding of drugs without taking into view their measure of dosage."

मात्राप्रमाणं प्रतिपुरुषमवेक्षितव्यं भवति ॥

च. सू. १५, १०

"The dosage of medicines is dependent upon individual patient".

नाल्पं दृष्ट्यौषधं व्याधिं यथाऽऽपोऽल्पा महानलम् ।

दोषवन्नातिमात्रं स्यात्सस्यस्यात्युदकं यथा ॥

संप्रधार्य बलं तस्मादामयस्यौषधस्य च ।

नैवातिबहु न त्यल्पं भैषज्यमववायेत् ॥

च. वि. ३०, ३१३-३१४

"An under-dose of medication cannot cure the disease just as a small quantity of water cannot quench a great fire; and medicine given in over-dose will prove harmful just as excessive watering harms the crops. So, after carefully considering the security of the

disease and the strength of the medication, the physician should administer it, neither in too large a dose nor in too small a dose."

द्रव्यप्रमाणं तु यदुक्तमस्मि-
न्मध्येषु तत् क्रोष्टव्योबलेषु ।
तन्मूलमालम्ब्य भवेद्विहृत्यं
तेषां विहृत्योऽभ्यधिको नभावः ॥

च. क. १२, ८६

"The dosage of drugs given in the section is with reference to moderate-bowelled persons and of average age and strength. This should be regarded as the standard for pharmaceutical purposes and larger or smaller doses have to be prepared keeping that standard in view".

समीक्ष्य दोषौषधदेशकालप्राप्त्याप्तिसत्त्वादिबोवकानि ॥

च. सि. ३. ६

"(.....should be administered) after a full investigation of the morbid humors, the medications, clime and season, homologation of the patient, his digestive power, psychic conditions, age and vitality."

The अनुपान or after-potion concept of Āyurveda is in accord with the theory of humors. The dose of medicine was to be followed by some after-potion prescribed as a corrective to the medication in accordance with the constitutional tendency of the patient or the humoral imbalance of the disease-condition.

Toxicology is one of the chief branches of Āyurveda. We need not reiterate that the knowledge of toxicology in India was far superior to that of other countries. When Alexander invaded India (323 B. C.), he had ordered that whenever any treatment for poisoning was necessary, only an Indian physician should be called. This is but one proof of the superiority of toxicology in India. विषकन्या or poison girls are no fable. They were reared to be used against enemies. It was the practical application of the theory of immunization in the body by gradual and constant administration of poison. India abounded in poisonous animals and vegetation. Kings were always under constant vigilance against poisoning, and so a physician was always in attendance to protect the king against food poisoning etc.

During wars, poisoning was resorted to for killing individuals as well as for mass murders. The knowledge of snake poison was also profound. The snakes were, and still are, plenty in India and hence the knowledge about snakes and toxicology came to be special branches of study. The classification, recognition, description etc., of serpents is astonishing. Snake poison was used as a medicine also. Ātreya has prescribed it for the incurable condition of Tridoṣa Udara, mostly a malignant growth.

The science of toxicology was the result of varied experiments. The poisonous drug or poisoned food was tasted by the senses, fire, by mixing them with water and other substances, and also by administering it to beasts and birds. We find that about 25 beasts and birds were thus made use of in such experiments.

The list of terms describing actions of drugs surprises us even today. We find more than 500 terms used in this connection.

Ātreya, while fully recognising the physical, pharmaceutical and physiological incompatibilities, goes further and describes the following 18 points which should be considered in deciding the incompatibility or otherwise of a drug.

यच्चापि देशकालाग्निमात्रासात्त्वयानिलादिभिः ।

संस्कारतो वीर्यतश्च कोष्ठावस्थाक्रमैरपि ॥

परिहारोपचाराभ्यां पाकात् संयोगतोऽपि च ।

विरुद्धं तच्च न हितं हृतसंपद्विधिभिश्च यत् ॥

च. सू. २६, ८६-८७

"That substance is unwholesome which is incompatible from the point of view of country, season, gastric fire, measure, homologations, Vāta and other body humours, preparation, potency, bowel tendency, state of the patient, rules of eating, things to be avoided or observed, cookery combination, palatability, richness of quality and rules of eating." Food as well as medicine should not be incompatible with eighteen points.

Channels of Administration

A general principle is laid down that medicine should be administered by the channels through which it can reach the seat of

disease at the earliest. In the world of today the channels of administering a drug have increased, but they all fall within the above comprehensive precept.

“In the disease of stomach, the medicine administered by the mouth, in diseases of the head nasal medications, and in diseases affecting the colon the medications given by the rectum, act most readily. In local diseases arising in the various regions of the body and in acute spreading affections and pimples and similar lesions, local applications suitable to the part afflicted, will prove specially efficacious.” (Caraka Cikitsā XXX, 294-295)

Time for administering drugs

The time for the administration of drugs should be fixed according to morbidity, constitution and age or season. Āyurveda gives the following times, ten in number, for administering medicine.

अत ऊर्ध्वं दशौषधकालान्वक्ष्यामः । तत्राभक्तं प्राग्भक्तमधोभक्तं मध्येभक्तमन्तराभक्तं सभक्तं सासुद्रं सुहृत्सुहृत्प्रसिं प्रासान्तरं चेति दशौषधकालाः ॥

सु. च. ६४, ६५

अभक्त.....	On empty stomach
प्राग्भक्त.....	Pre-prandial
अधोभक्त.....	Post-prandial
अन्तराभक्त.....	In-between the meal
मध्येभक्त	In the middle of the meal
सभक्त.....	Mixed with the meal
सासुद्र.....	Given in the beginning and at the end of the meal
सुहृत्सुहृत्.....	Repeatedly
प्रास	With each morsel of food
प्रासान्तर.....	In-between morsels

This is followed by detailed exposition as to why the medicines are to be taken at particular periods.

The brief survey of ‘pharmacy’ as it was in theory and practice in ancient India would suffice to give an idea of the

development of the science in its multiple aspects, some of which have not been excelled by modern science. The rich heritage left to us needs but proper research so that we can proudly hold it before the scientific world and declare it as one of our richest contributions to science.

CHAPTER X

FEES, PRESENTS AND REMUNERATION TO MEDICAL MEN

Although the ideal purpose of this noble art of healing was the philanthropic service to humanity, it was many a time practised for the sake of livelihood also. Caraka lays down—

स चाध्येतन्या ब्राह्मणराजन्यवैश्यैः । तत्रानुप्रदार्थं प्राणिनां ब्राह्मणैः, आरक्षार्थं राजन्यैः, वृत्त्यर्थं वैश्यैः, सामान्यतो वा धर्मार्थकामपरिप्रदार्थं सर्वैः ।

च. सू. ३०, २९

“This science is to be studied by the Brāhmanas, the Kṣatriyas and the Vaiśyas. By the Brāhmanas with a view to benefiting all creatures, by the Kṣatriyas as subserving their role of protectors and by the Vaiśyas as a means of livelihood; and in general, by all, with the object of attaining virtue, wealth and pleasure.”

Similarly Suśruta says—

तदिह शाश्वतं पुण्यं स्वर्गं यशस्यमऽयुष्यं वृत्तिकरं चेति ॥

सु. सू. अ ९, १९

“This science of life is permanent and yielding merit, heaven, fame, longevity and livelihood.”

Although people practised medicine for livelihood, yet no mere commercial spirit was allowed to prevail in this noble art. In this connection Caraka says that:—

कुर्वन्ते ये तु वृत्त्यर्थं विक्रित्सापण्यविक्रयम् ।

ते हित्वा काञ्चनं राशिं पाण्डुराणिमुपासते ॥

च. चि. १/४, ५९

“Those who for the sake of a living, make merchandise of medicine, bargain for a dust-heap, letting go a heap of gold.”

Even to the practitioner who never wished to have any remuneration, this noble art was never fruitless.

कविदयः कविमैत्री कविदुर्मः कविशयः ।

कविद्वययोगश्च विक्रित्वा नास्ति निष्फला ॥

"Practice of medicine is never fruitless; it sometimes gives money, sometimes religious merit, sometimes renown, or sometimes the opportunity for study."

That the art of medicine was practised for livelihood even in very olden times, can be seen from the following hymn of the Rgveda.

कारुहं ततो मिषयुपलप्रक्षिणी नना ।

नानाविधो वसुयवोऽनुगा इव ॥

ऋ. ९, ११२, २

"I am a poet, my father is a physician and my mother pounds corn. Thus we follow different vocations with a desire for wealth like kine."

Then there was a golden period when all the Dwijas—Brāhmanas, Kṣatriyas and Vaiśyas, practised this art with different motives. As long as mercy was the dominant ideal of civilization, the missionary spirit guided the profession. Princes and ministers renounced their worldly power, wealth and position to serve humanity. A number of intellectuals devoted their whole lives to this humane work without any expectation of remuneration. Not only that but they travelled to foreign lands to relieve ailing humanity, and thus laid the foundation of missionary medical work. Such references of missionary Sādhus and Sanyāsins are found from various books and in countries far beyond the limits of political India—in Ceylon, Siam, Burma, China, Bokhara, Persia, Arabia etc. Thus generally the Brāhmanas practised this art with higher motives. Kṣatriyas learnt and practised this art for the sake of self-protection just befitting their natural disposition and throughout the ancient era of our national life full of great battles, they evolved military surgery out of necessity and scientific curiosity. As time went on there was a great need for more and more physicians and the Vaiśyas naturally came forward, thus fulfilling the double purpose of compassion and livelihood. As practitioners of the ancient art of

healing, the physicians have been holding a very high position in the eye of society.

The above-mentioned facts go to show that the medical art was practised neither solely for money nor was always free of cost. The charging or otherwise of the fees depended upon the circumstances of the physician and the patient. The physician-patient relations engendered a dominant spirit of love and service on the part of the physician and the spirit of appreciation and liberality on the part of the patient. This is proved by the following injunction of Āyurveda requiring every practitioner of medicine to give his treatment free as also his medicines free in the following circumstance .

द्विजगुरुदक्षिदमित्रप्रव्रजितोपनतसाध्वनायाभ्युपगतानां चात्मवान्धवानामिव स्वभेषजैः प्रतिकर्तव्यम्,
एवं साधु भवति ।

सु. सू. २,८

"The physician should treat with his own medicines and like one's own relations, the following persons: The Brāhmaṇa, the preceptor, the poor, the friend, the recluse, the sage and the helpless, whoever of them that approaches him for treatment. This tends to good consequence."

Still the princes and princely persons and every man of means never failed to adequately appreciate the medical services. The problem of monetary remuneration varied according to the value attached to money in various civilizations of different periods and places.

We read in the story of Jivaka that he received fees amounting to 16000 coins and presents from a patient which represents a sum far in excess of the fees received by the modern doctors. The man who received such a big fee from a wealthy man, treated other people without expecting any remuneration. Although the physician was expected not to bargain for his fees, it was made incumbent on the patients to discharge their obligation towards the physician.

चिकित्सितस्तु संश्रुत्य यो वाऽपेक्षत्य मानवः ।

नोपाकरोति वैवाय नास्ति वश्येह निष्कृतिः ॥

च, वि. १/४, ५५

“Whoever, having been treated by a physician, does not recompense him, whether or not there be a previous understanding for remuneration, that man is beyond redemption.”

Caraka puts the position in strong terms that the fees may or may not have been fixed, but the patient must pay the due, as otherwise, he cannot absolve himself from the obligation of the physician.

From the story of Jivaka we can gather that sometimes the physician treated a case with a contract to get the fees only if the case was cured. Also there are instances where the fee is settled beforehand as well as when the fee is not settled at all.

If a quarrel arose in the matter of fee, the question was according to Kauṭilya referred to a committee of experts for final decision.

यथा वा कुशलाः कल्पयेयुः तथा वेतनं लभेत ।

कौ. अ. ३, १३

“That is the fee to be paid which is determined by the experts”.

Although the physician had his high ideal and noble code of morality, the society was never ungrateful and the men of means never failed to venerate the Vaidya by giving him remuneration in cash or kind. People like Bhīṣma honored the physicians who were called in to treat and gave them much wealth although their services were not actually accepted. The State maintained physicians, some as court physicians, some as village physicians, some as veterinary physicians, some as military physicians and some as travelling physicians. They were either paid in cash or were given a plot of land and allotted daily rations.

As the physician behaved so generously, society was not blind to the obligations of these incarnations of Aświns.

किं पुनर्निषजो मर्त्यैः पूज्याः स्युर्नातिशक्तितः ।

च. वि. १/२, ५०

“What need, then, is there to say, that physicians can never be honoured too much by mere mortals who are subject to death !”

There was an unwritten tradition that after a victory on the battlefield, after recovery from a long or serious illness and after happy delivery, everyone whether a king or a commoner, expressed his thankfulness to the physicians by giving them presents and rewards.

In short, according to Caraka, this science of Āyurveda was promulgated for acquiring religious merit as well as for the sake of wealth, and with spiritual release as its final goal (धर्म-अर्थ-काम-मोक्ष).

CHAPTER XI

THE VAIDYAS

It may be asserted with a fair degree of certainty that the institution of the Vaidya, the physician, is as eternal as medicine itself. It is not confined to a civilised state of society alone. Even when man was in the most primitive stages of his development, there must have been one or the other of his species that came to the rescue of his mate or offspring or members of the tribe or clan in an hour of pain and travail. His remedies might have acquired any shape from that of consoling sounds to herbs and incantations or coarse methods of medical and surgical manipulations.

In India where history begins with the appearance on the scene of the Indo-Āryan clans, the institution of the physician is found to be well recognised and established ever since the days of the Ṛgveda. The Aświns loom large in the Ṛgveda as the physicians of the gods and the divine institution may safely be taken to reflect its counter-part in mundane society, the mundane physicians in a context which denotes that the profession had not yet become hereditary but was open to any one to pursue. (Rg. 9-112-2)

कारुहं ततो भिषगुपलप्रक्षिणी नन।

नानाविधो वसूयवोऽनुग इव ॥

"The hard I am. My dad is a leech, mummy lays corn upon the stones. Striving for wealth with varied plans we follow our desires like kine."

We find again in the following verse the specific reference to the physician, the Bhiṣak, who is credited with the learning and the possession of disease remedies. Rg. 10 97-6

यत्रौषधीः समग्मत राजानः समिताविद ।

विप्रः स उच्यते भिषक्क्षोहामीवचातनः ॥ ६ ॥

"He who hath store of herbs at hand, like kings and a crowd of men, physician is that sage's name, fiend-slayer, chaser of disease."

Even in that early age of civilised society, medicine had already become a complex science and art and presupposed certain degree of knowledge and intelligence that was possible for the highest stratum of society. Thus it was the Brāhmaṇa, the natural teacher and priest of the society that was also the physician. The sages held the Soma herb supreme among the plant kingdom and its juice opened their vision to immortal truth. The verse in the Rgveda sings thus: (10-97-22).

ओषधय सं वदन्ते सोमेन सह राज्ञा ।

यस्मै कृणोति ब्राह्मणस्तं राजन् पश्यामसि ॥२२॥

" With Soma as their sovereign Lord
The plants hold colloquy and say;
O, King, we save from death the man
Whose cure a Brāhmin undertakes".

The Atharva-veda is necessarily the source of the Āyurveda, for in it we find the preoccupation with the remedies for diseases, evil spirits and other ailments of man. There the physician is still the magic man, priest and therapist rolled into one. But the various branches of medical aid have attained their distinctive ramifications. There is treatment by herbs, by organic body-juices, by incantations and we have surgical extractions and the countering of poisons.

Again here is a physician assuring his patient that he will procure all the remedies that mortal physicians are acquainted with.

यावतीषु मनुष्या भेषजं भिषजो वि

तावतीर्विषभेषजीरा भरामि त्वाममि ॥२६॥

Already in the Vedic age, four different branches or techniques of treatment were well defined.

The Ātharvaṇī, the Āṅgirasī, the Daivī and the Mānuṣī are the four kinds corresponding to magical charms, body-juices or organo-therapy, the divine or psycho-therapy and lastly the human or drug therapy.

आयर्वणीराङ्गिरसीदैवीमनुष्यजा उत ।

ओषधयः प्रजायन्ते यदा त्वं प्राणं जिव्यसि ॥

अथर्व. ११-४-१६

In the post-vedic period which is the golden age of Āyurveda, the position of the Vaidya was at the height of its glory. In the Caraka Samhitā we have a complete picture of the physician, his equipment of learning and therapeutic accessories, his dress and manners, his standard of ethics and his general position in society as guide and leader.

Dress

Like his modern counterpart, the ancient physician of India was conspicuous by his clean and well-washed clothes, his short-clipped hair and nails and his general demeanor of smartness and geniality. Sūśruta describes him thus:

“ The medical graduate should enter into the medical profession resorting to the close clipping of his hair and nails, cleanliness, white raiment, holding of an umbrella and handstick, wearing of the shoes, and avoidance of gaudy clothes, and imbued with a spirit of helpfulness, brotherhood and sincerity towards all creatures’.

S. Sūtra. 10. 3.

It is noteworthy that even in England for many centuries, the physician held a gold-tipped cane in his hand while visiting his patients.

Manners And Ethics

The physician was expected to be a paragon of gentlemanly qualities. He should not be given to braggartism. Even though possessed of learning and skill in his science, he should not be loud in proclaiming it to the world. Caraka lays down:

ज्ञानवतापि च नात्यर्थमात्मनो ज्ञाने विक्रियतव्यम्, आत्मादपि हि विद्वत्त्वमानादत्यर्थमुद्विजन्त्यनेके ॥

च. वि. ८, १३

“Even though possessed of knowledge one should not boast and speak of it over much. For though a man be virtuous otherwise, boastfulness makes him hateful to people.”

His general attitude must be genial, gentle, modest and sincere. He was to harbour no ill will against any one and should look upon the destitute, the poor and the helpless as his own kith and kin and be ready to offer help to such.

His attitude to women was particularly aloof and detached. When he entered a patient's house he was to keep his head bent and not be curious about the things and persons about him. His mind must be devoted to the welfare of the patient alone. If he had to enter to treat a woman, he should never go unaccompanied, and he should neither laugh nor smile nor exchange irrelevant words with her. No gifts offered by her in the absence of the husband are to be accepted. Even if he discovers her attachment to him and her amorous overtures, he should not respond. Neither should he divulge them to others.

The Kāśyapa-saṃhitā is emphatic on the subject. It also describes the attitude he should have towards another physician that may happen to be interested in the patient.

न चातुरकुण्डेषु स्त्रीभ्यः प्रेक्ष्यामिरपि सहोपहासं गच्छेत् । न चासामपूजापुरस्कृतं नाम गृहीयात्
मान्यस्थानेनैव तु ब्रूयात् । न च ताभिः संव्यवहारमतिप्रणयं वा कुर्यात्, न च भर्तुरविदितं स्त्रीभ्यः किञ्चिदा-
दद्यात्, न चाविदिनः प्रविशेत्, न च रहसि स्त्रिया सह ब्रूयादासीत् वा, न चैनां विवृतां प्रेक्षेत विद्वसेद्वा,
प्रणयन्तीं चोपेक्षेत, न च प्रकाशयेत् ।
का. सं. वि. ८

अथान्यो मित्रमभिषदेत्तस्मै क्षमेत्, साम्ना चानुनयेत् । पुनः पुनः कृतस्यन्तं तु विगृह्यादितो
ग्रन्थेनाऽवकिरेत् । न चास्य वाक्यावकाशं दद्यत् । ब्रुवतोऽपि प्रोक्तं च ब्रूयात्—नैतदेवमिति । परिहसेत्,
अपशब्दांश्चास्य विगृहीयात्, अर्थे कृच्छ्रे चैनमवतारयेत्, न चैनमवशः पश्येत्, स्तोत्रगौरवैर्न वर्षयेदिति ॥

का. सं. वि. ९

“In the household of the patients, he should never engage himself in joke with women, even with female servants. He should not utter their names without prefixing terms of reverence; he should always speak giving the place of honor. He should not try to have any transaction with or great attachment to them. He should accept

nothing from the woman without the knowledge of her husband. He should never enter without informing beforehand. He should neither talk nor sit with a woman in privacy. He should never look at her when she is uncovered or should not laugh at her. He should be indifferent towards her if she shows her love but should never bring it to light.

If any other physician comes in, he should forgive him and should win him over by friendly conversations. If he finds fault with him again and again, he should be challenged to debate and should be overpowered, from the very beginning, by the authority of other texts. He should not be given an opportunity to speak. If he begins to speak, one should bawl out 'It is not so.' One should ridicule him and should catch hold of his faulty words and should involve him into difficulties. One should not treat him roughly losing control but should overpower him only by words of seeming praise".

Vāgbhaṭa sums up admirably the picture of a true Vaidya, his attitude and equipment in the following verses:

आहूत एव यो याति सुवेषः सुनिमित्ततः ।
 गत्वाऽऽतुरार्यादन्यत्र न निवृत्ते मनः कश्चित् ॥
 व्याधीन्परीक्षते सम्यक् निदानाद्विशेषतः ।
 द्वेषगीयां च तद्वातां न प्रकाशयते बहिः ॥
 सइषा न च तस्यापि क्रियाकालमहापयम् ।
 जानाति चोपचरितुं स वैद्यः सिद्धिमश्नुते ॥

अ. सं. सू. २, १४-१६

"He who visits the patient only on invitation, well dressed and having perceived the good omens, who having entered reposes his mind on nothing else than the patient, who examines the patient and his malady in the light of the etiological factors, who never divulges any shameful features of the patient's life and who knows the proper time and stage of treatment and uses it, he indeed is the true physician that achieves success in his treatment".

Professional Ethics

The medical profession was pursued as a means of living originally by the third class of Aryan society i. e. the Vaisyas. The

Brāhmaṇa and the Kṣatriya learnt the science, the former for researches in the higher spheres of the knowledge and for the relief of humanity purely as a mission of compassion, the latter for the advancement of the science and for the protection of oneself and his dependants from disease.

Yet all the four castes were entitled to study the science of Āyurveda for general enlightenment in the matter of purity, health, happiness and longevity.

धर्मार्थं सर्वैः ॥ का. सं. वि. १०

“All may learn the science for the sake of a righteous and pure life.”

Though the professional Vaidya was making a living out of his profession and often fixed up the fees due to him in any particular undertaking, he yet had a code of ethics to observe. He treated the poor and the destitute, the maimed and the travellers and mendicants free of charge. Even in cases where there was no previous agreement as regards the fee, it was obligatory on the part of the patient to pay up his fees and discharge his debt to the physician. There was a widespread sentiment which obtains even today that among the debts that are particularly sinful if not paid, the physician's debt is one.

The ideal, a part from the exigencies of the physician's profession as regards fees, was always to keep in view the principle of compassion and service for the fellow-men and Caraka lays down the ideal in unrivalled grandeur in the following verses:

मिषगप्यातुः सवान् स्वसुतानिव यत्नवान् ।
 आवाधेऽप्यो हि संरक्षेदिच्छन् धर्ममनुत्तमम् ॥
 धर्मार्थं चार्थकामार्थमायुर्वेदो महर्षिभिः ।
 प्रकाशितो धर्मपरैरिच्छद्भिः स्थानमक्षरम् ॥
 नार्थार्थं नापि कामार्थमथ भूतदयां प्रति ।
 वर्तते यश्चिकित्सायां स सर्वमतिवर्तते ॥
 कुर्वते ये तु वृथार्थं चिकित्सापण्यविक्रयम् ।
 ते हिंसा कान्धनं राशिं पाण्डुराशिमुपासते ॥

दारुणैः कृष्यमाणानां गदैर्वैवस्वतक्षयम् ।
छित्त्वा वैवस्वतान्पाशान् जीवितं यः प्रयच्छति ॥

धर्मार्थदाता महशस्तस्य नेदोपलभ्यते ।
न हि जीवितदानाद्धि दानमन्यद्विचिष्यते ॥

परो भूतदया धर्म इति मत्वा चिकित्सया ।
वर्तते यः स सिद्धार्थः सुखमस्यन्तमश्नुते ॥

च. वि. १/४, ५६-६२

The Vaidya besides these accomplishments was required also to be a good polemic. If he were to meet and be interrogated by a fellow of the profession on any point of theory and practice, he must be able to meet him in discussion and if the opponent persists in carping at him, he should deal with him severely and subdue him by reproaches and repulses in satirical terms.

अथै कृच्छ्रे चैनमवतारयेत्, न चैनमवशः परुषयेत्, स्तोत्रगर्भैरेवेन धर्षयेदिति ।

क १. सं. वि.

The Vaidya was enjoined to seek the aid of other members of his class in diagnosis of different cases and in the determining of prescriptions and their pharmaceutical preparation. He must not quarrel with the fellows of his profession. A general spirit of geniality and kindness and a supreme ambition to advance the welfare of the people were demanded of him.

Kāśyapa says:

न चाम्यभिषग्मिर्विरोधं गच्छेत् । संयुक्तश्च तैरौषधं प्रकल्पयेत् । प्रगल्भो निःशङ्क उपस्थितपदे
विस्पष्टं विचित्रं यदुपनयवद् आहकमविरुद्धं धर्म्यं सदा ब्रूयात् । प्रजानां हि स्वस्तिकामो भिषगिह चामुत्र च
नन्दत इति ॥ ८ ॥

का. सं. वि. ८

Lastly we observe that the one great preoccupation of the ancient physician was to find out whether a particular case that came to him was curable or incurable. A whole science of the signs and symptoms that prognosticated the favourable and the unfavourable trend of disease was laid out in order to enable physician to avoid the path to infamy and reproach by handling cases that were incurable by any measure. Many factors must have been behind such a dread

of incurable cases. The fear of unpopularity and consequent fall in patronage was evidently one factor. But even more persuasive was perhaps the dread of state punishment or penalty if a physician was found to have been responsible for the death of a patient. A wise physician sometimes undertook treatment of even incurable cases only after declaring it to be such before the relatives of the patients and tried severe methods and measures with the permission of the relation and the state officials, in order to leave no stone unturned in saving the patient's life, while absolving himself of the responsibility of his failure.

On this subject of prognostics, there is a striking resemblance in the spirit behind the growth of the science between the works of Indian writers like Caraka and the Greek author of Medicine, Hippocrates.

Hippocrates says thus in the book of Prognostics:

"It appears to me a most excellent thing for the physician to cultivate Prognosis, for by foreseeing and foretelling in the presence of the sick, the present, the past, and the future, and explaining the omissions which patients have been guilty of, he will be the more readily believed to be acquainted with the circumstances of the sick; so that men will have confidence to entrust themselves to such a physician. And he will manage the cure best who has foreseen what is to happen from the present state of matters. For it is impossible to make all the sick well; this, indeed, would have been better than to be able to foretell what is going to happen; but since men die, some even before calling the physician, from the violence of the disease; and some die immediately after calling him, having lived, perhaps only one day or a little longer, and before the physician could bring his art to counteract the disease; it therefore becomes necessary to know the nature of such affections, how far they are above the powers of the constitution, and, moreover, if there be anything divine in the diseases, and to learn a foreknowledge of this also. Thus a man will be the more esteemed to be a good physician, for he will be the better able to treat those aright who can be saved, from having long anticipated everything; and by seeing and announcing beforehand those who will live and those who will die, he will thus escape censure."

"In as much as this work is entitled the Book of Prognostics, so it turns on the prescience that is to say, the fore-knowledge of the physician, which Hippocrates recommends to physicians for three reasons: first, for the confidence of mankind, which it will conciliate to the physician; then because it will free the practitioner from all blame, if he has announced beforehand the fatal result of diseases; and further, as being a very great instrument in effecting the cure.

But he who would wish to know properly beforehand those who will recover from a disease, and those who will die, and those in whom the disease will persevere for many days, and those in whom it will last for a few, should be able to comprehend and estimate the doctrine of all the signs, and weigh in his mind and compare together their strength. The Hippocratic foreknowledge rests not only on the observation of the signs, but also on the understanding of them.

First, to attract the confidence of one's patients; second, to free the physician from blame by enabling him to announce beforehand the issue of the disorder about which he is consulted, and third, to give him a decided advantage in conducting the treatment by preparing him for remarkable changes in the diseases before they occur. And, in like manner, I may be allowed to remark the master of a ship who shows himself prepared for all changes of the weather, will naturally attract the confidence of those entrusted to his charge; and whatever may be the result, he will be freed from blame if his ship should be damaged in a storm which he had previously predicted; and surely his knowledge of impending commotions in the sea and sky, will be of advantage to him by enabling him to make preparations for them".

One can see from the Section of Prognostics (Indriya-sthāna, Caraka) that dreams and sights and sounds, the complexion and voice and many other such traits show variations long before the attack of disease. And some of these symptoms appearing after the onset of disease prognosticate sure death or recovery. There is a great element of mystical lore in it. But there is much that may be verifiable by observation and experiment and that is a great aid to the physician

who undertakes the treatment. Adam, a recent writer, writing upon the subject makes the following observation:

“Looking then to the importance of general Prognostics, I have often wondered why this branch of Semeiology is no longer cultivated by the profession. Did not the ancient physicians follow the best possible plan when they first described the general phenomena of diseased action and then applied them to particular cases? Surely they did right in first taking a comprehensive view of the whole subject described before attempting to examine the different parts of it in detail. This, in fact, constitutes the great superiority of the ancient savants over the modern, that the former possessed a much greater talent for apprehending general truths than the latter, who confine their attention to particular facts, and too much neglect the observation of general appearances. I trust no one will be offended if I venture to pronounce regarding the present condition of our professional literature, that (to borrow an illustration from the logic of Kant) it is altogether Cyclopic, that is to say, it wants the eye of Philosophy, for, although we have learned to examine particular objects with greater accuracy than our forefathers did, the sphere of our mental vision, so to speak, is more confined than theirs, and cannot embrace the same enlarged views of general subjects. Surely then, we might gain a useful lesson by endeavouring to combine their more comprehensive views with our own more accurate and minute observation”.

CHAPTER XII

THE VAIDYA AND SOCIETY

It is a truism to state that the degree of honor accorded to the learned professions represents the degree of the refinement of the civilization of a people. Among the learned professions, that of the healer, the medical man, stands supreme, being vital to the health, happiness and survival of the race. From the earliest history of man the healer has donned the robes variously of the priest, prophet and physician, as befitted the spirit and degree of refinement of the age.

In the early dawn of human history when the eye of man beheld spirits, gods and demons who were credited with making trees, waters and rocks and hills their habitation and with powers for good or bad to exercise over man, religion and medicine were scarcely distinguishable from each other. Every ill-humor of the body or the mind was attributed to the evil influence of some invisible spirit, and exorcism or propitiatory rite was all the therapeutics demanded. The priest, naturally, was the right dispenser of healing and healing formed an integral part of the ritual of religious worship.

In the R̥gveda, the earliest available records of civilized human life, the knowledge of healing, as a science comprising both religious and lay forms of therapeutics, had reached a high degree of progress. Besides, the healer and the healing science were already developed as an institution and the healer, the Bhiṣak or the physician was held in high honor among the gods as well as among men. The hierarchical order of the gods in the tradition of a race, represents the hierarchical order among its men. Already at that early period of human history the gods had their priests and their official physicians. The Aświns were twins and expert in medicine and surgery. They healed and mended the injuries to the gods in their age-long conflict with the demons. There grew up in human society the counterparts of the divine healers and the sect called Atharvāṇas named after Atharvāṇa, the seer and founder of the Atharvaveda, were popular as healers and exorcists in the Vedic and post-Vedic times.

The Aświns though originally minor gods were later raised to the high status of the other gods and regarded worthy of being offered oblation in sacrifices by virtue of their proven powers in the healing art.

अग्निनी देवमिषजो यज्ञवाहविति स्मृतौ ।
यज्ञस्य हि शिरश्छिन्नं पुनस्ताभ्यां समाहितम् ॥
प्रशीर्णा दशनाः पूरुणो नेत्रे नष्टे भगस्य च ।
वज्रिणश्च भुजस्तम्भस्ताभ्यामेव चिकित्सितः ॥
चिकित्सितश्च शीतांशुर्गृहीतो राजपक्ष्मणा ।
सोमामिषतितश्चन्द्रः कृतस्ताभ्यां पुनः सुखी ॥

मार्गवक्ष्यवनः कामी वृद्धः सन् विकृतिं गतः ।

वीतवर्णस्वरोपेतः कृतस्ताभ्यां पुनर्युवा ॥

एतैश्चान्येभ्य बहुभिः कर्मभिर्भिरगुत्तमौ ।

बभूवुर्दृशं पूज्याविम्बादीनां महात्मनाम् ॥

च. वि. १-(४), ४१-४५

"The Aświns, who are the physicians of the gods are celebrated as the resuscitators of sacrifice, for it is they that reunited the severed head of sacrifice. It is these two, again, that successfully treated Pūṣan when his teeth had become loosened, Bhaga when he had lost his eyesight and Indra when his arm had become stiffened. These two, moreover, cured Soma the Moon-god of consumption and restored him to his happiness when he had fallen from his state of good health. When Cyavana, the son of Bṛghu, had become decrepit with loss of voice and body lustre, as the result of old age, but hankered still for sense pleasures, it is the Aświn-pair that made him young again. On account of these and many other miracles of healing, these two, the greatest of physicians came to be regarded with honour by great personages such as Indra and others".

The Caraka Saṃhitā recites their wonderful feats and even above Dhanvantari known as the God of medicine, the Aświn twins are the real gods and originators of the Science of Medicine. The high honor, accorded to them in the Vedas and the number of hymns composed and sung in their honor are indications of the noble status accorded in Vedic society to their mortal counterparts.

The period succeeding the Vedic one, retained its respect for the healer though by then already, impostors known by the name of Kuvaidyas or Kuhakas from which the modern term "Quack" is derived had made their appearance in society and were increasing in their number. The Caraka Saṃhitā which belongs to that period between the Vedas and the Smṛti and Mahābhārata devotes a lot of attention to drawing the distinction between the real physician and the pretentious quack. It accords the greatest homage to the real one known as the bringer of life (प्राणमिवर) and condemns in elaborate manner the destroyers of life (प्राणहन्तारः), whose ways and manners are fully described in impressive words in a whole chapter (C. Sūtra. XXIX).

That reflects the true conditions obtaining by then in society. By then, the profession of the healer must have become attractive, lucrative and enviable one of social distinction. Caraka offers sincere and respectful obeisance to the true physician, the bringer of life. Having described the two kinds of medical practitioners—the true and the false, Caraka concludes thus:

मिपच्छन्नं प्रविश्यैवं व्याधितांस्तर्कयन्ति ये ।
 वीतंसमिव संभृत्य वने शाकुन्तिका द्विजान् ॥
 श्रुतदृष्टक्रियाकालमावाज्ञानबहिष्कृतः ।
 वर्जनीया हि ते मृत्योश्चरन्त्यनुचरा भुवि ॥
 वृत्तिहेतोर्मिषङ्मानपूर्णान् मूर्खविशारदान् ।
 वर्जयेदातुरो विद्वान् सर्पास्ते पीतमारुताः ॥
 ये तु शास्त्रविदो दक्षाः शुचयः कर्मकोविदाः ।
 जितहस्ता जितात्मानस्तेभ्यो नित्यं कृतं नमः ॥

च. सू. २९, १०-१३

“Those who, putting on the garbs of the physician, thus gull their patients, just as the bird-catchers in the forest (gull) the birds by camouflaging themselves in nets, such persons, outcastes from the science of healing, both theoretical and practical, of time and of measure, are to be shunned, for they are the messengers of death on earth. The discriminating patient should avoid these unlettered laureates, who put on the airs of physicians for the sake of a living; they are like serpents that have gorged on air. But salutations be constantly proffered to those others who are learned in the science, skilful, pure, expert in performance, practised of hand and self-controlled”.

The stress laid on the avoidance of the cases which showed symptoms of incurability indicates the dread of failure in treatments that the medical man entertained in that age. Loss of reputation, loss of monetary emoluments and worse results such as perhaps the censure and punishment by the State where death was recognised to be due to wrong methods of treatment, must have loomed large in the minds of medical practitioners. This gave rise to an elaborate science of diagnosis and investigation in the light of the patient's dreams and premonitory symptoms and of the casual circumstances attending upon, surroundings of the patient, the messenger he sends

to fetch the physician and such other conditions like omens on the physician's path. This is elaborately described in the whole section devoted to it known as इन्द्रियस्थान 'prognostics'. Throughout as well as at the outset of the treatise Caraka insists on avoiding the undertaking of cases showing symptoms of incurability. Such cases are known as 'Pratyākhyeya' those that deserve to be refused. Not that incurable cases were refused treatment absolutely, on the other hand we find the physician declaring the patient before his relatives to be incurable and with the permission of the state and his relations, heroic measures were resorted to, to alleviate the disease.

He mentions that declaring certain cases to be such yet the physician may undertake to treat them with view to alleviate the evil, so as perhaps to assuage the pain or prolong the life as long as possible.

संपूर्णरूपं क्षयजं दुर्बलस्य विवर्जयेत् ।

नवोत्थितं बलवतः प्रत्याख्यायचेत् क्रियाम् ॥ १४९ ॥

च. चि. १८

क्रियातिवृत्ते जठरे त्रिदोषे चाप्रशाम्यते ॥ १७५ ॥

ज्ञातीन् समुद्बुद्धो दारान् ब्रह्मणाक्षुपतीन् गुरुन् ।

अनुज्ञाप्य मिषक् कर्म विदध्यात् संशयं ब्रुवन् ॥ १७६ ॥

अक्रियायां ध्रुवो मृत्युः क्रियायां संशयो भवेत् ।

एवमख्याय तस्येदमनुज्ञातः सुदृढगणैः ॥ १७७ ॥

च. चि. १३

"The patient suffering from cough born of consumption with all the symptoms of consumption fully developed, and who is debilitated should be considered incurable but if the cough is of recent origin and the patient is strong the treatment should be undertaken despite declaring it to be of the incurable type".***"When the abdominal disease due to the gathering of fluid has gone beyond the stage of treatment or if the humoral tri-discordance has not got subdued, the physician should summon the patient's kinsmen, well-wishers, wives, Brāhmins, state authorities, the caste and elders and speak to them about the precarious condition of the patient. If not treated, the patient's death is certain. But if treated by poison therapy he may have a chance to survive. Having spoken thus and being permitted by the patient's well-wishers to proceed, (he must administer poison.....)."'

There is nothing more reasonable perhaps that even the modern counterpart of the old time Vaidya can do under such circumstances.

The Smṛiti And The Classical periods

Having witnessed the priest-prophet beginnings of the medical man and his later evolution in the post-vedic or saṃhitā period into a fully established lay healer akin to the one of the modern times, we find a deterioration in his status consequent presumably upon a deterioration of his high ethical and intellectual standards set up in the hayday of Āyurveda. Particularly this applies to the art of surgery which dwindled into a handcraft unworthy of man of learning and of intellectual equipment. It is reasonable to conclude that medicine began to advance and gradually encroached upon the field that was formerly held by surgery so much so that most cases formerly regarded as amenable to surgical measures were claimed by the physician in his peculiar domain. There must have been a tendency to make as much of surgery as possible superfluous and the remaining inevitable measures of incision and excision of wounds and such other minor traumatic conditions, relegated to the simple craftsman such as the barber. Even in Europe until the eighteenth century, the barber surgeon was the prevailing institution. Even in the achievements of the modern medicine, this tendency is apparent. More and more diseases such as syphilis and gonorrhea, surgical tuberculosis, and diphtheria have been taken out of the domain of surgery by the inventions of the sulpha group of drugs, radiology and other methods of therapeutics.

We find proof of this kind of transition where the Cikitsaka, the therapist, because of his handling impurities like the pus, flesh and blood was regarded as unworthy of attendance at religious sacrifices and ceremonial dinners.

Manu lays down:

विकृतिस्त्वन्देवतकाम्यांश्च विक्रियिष्यता ।

विपण्येन च जीवन्तो वज्र्याः स्मृन्मृत्युव्यवयोः ॥

"Those who earn their living by therapeutic service or from church property or meat dealing or by trade should be avoided in all religious as well as in obsequial ceremonies."

पूयं चिकित्सकस्यान्ने पुंश्चन्यास्त्वन्नमिन्द्रियम् ।

विश्वं वार्धुषिकस्य च शस्त्रविक्रयिणो मलम् ॥

म. अ. ४-२२०

Again he says: "The food given by a therapist is just like pus, that by a harlot is like semen, that by a usurer is like fecal matter and that by a wine dealer is like refuse."

चिकित्सककृतानां शिल्पकर्तुश्च वार्धुषेः ।

षण्डस्य कुलटायाश्च उद्यतामपि वर्जयेत् ॥

म. अ. ४-२४९ (२)

"The food offered by a therapist, an ungrateful person, a sculptor, a usurer, a eunach and by a harlot should not be accepted".

It is evident that the medical profession during this period had fallen from its pristine glory and nobility. The reasons are obvious. The learning and the practical clinical training disappeared and it became a mere trade and craft descending from parent to offspring as was the case with other trades like smithy, carpentry and agriculture. In such circumstances, the love of knowledge, research and high ethical principles could scarcely be expected to prevail. The Bhiṣak so exalted in the Caraka and other saṃhitās becomes a mere Cikitsaka, a therapist. The tenets of non-infliction of pain (अहिंसा), must have discouraged surgical measures, dissection and other means involving the handling of flesh, blood and other unseemly things. They must have ultimately depended on a few time-honored herbal and mineral recipes incidentally opening up a field of research in metals. The great buddhist Nāgārjuna was a veteran in the field of mercury preparations and an alchemist. But Āyurveda, as a science of life, with its vast list of animal products in its materia-medica and dialectics must have disappeared. The tenets of Vedic religion became more and more dogmatic and the observances of external purity and piety gained ascendancy over the liberalism of thought and spirit that obtained previously. As a sign of the general deterioration of thought and observance, the

handling of bodily impurities of blood and flesh incidental to the practice of surgery was regarded as disreputable. The high purpose of surgical therapeutics was lost sight of and only the unseemliness of the method kept in view. This surely signifies a general decay in the cultural and scientific life of the race when mere forms were remembered and worshipped. The noble purpose of philosophy and science was clouded by the clamorous adoration of the external forms of religion and the catch-phrases of science substituted for its spirit and meaning. For, in no otherwise, can we understand the fall and neglect of such a branch of knowledge as Āyurveda, which men of the previous age had held to be supreme even above the other Vedas.

This must have led Caraka whom we have placed somewhere in the second century B. C. when the Vedic religion and culture was reasserting itself to have rescued the disappearing science from oblivion and compiled his immortal saṃhitā to reinstate the great science of medicine in the national life. That is why in the classical period of India that is for the centuries from the second or first century B. C. despite the injunction of the Smṛtis, Vaidya reasserted his position of social importance in India. The references to the place of the Vaidya in the structure of the village and the towns, and the growing recognition of the significance of the medical science prove his re-instatement before Indian life was once again plunged into confusion and consequent dislocation by foreign invaders or conquerors namely the mohammedans.

The following few references culled from classical writers bear testimony to the above conclusion.

अन्यानि शास्त्राणि विनोदमात्रं प्राप्तेषु वा तेषु न तैश्च किञ्चित् ।
चिरिस्मृतज्योतिषमन्त्रवाशः पदे पदे प्रत्ययमावहन्ति ॥३॥

“All other arts and sciences are only for amusement. There is nothing worthwhile to be gained from them. But the sciences of healing, astrology and thaumaturgy are corroborated at every step.”

आन्ता वेदान्तिनः किं पठथ शततयाद्यापि चाद्वैतविद्यां
पृथ्वीतत्त्वे कुठन्तो विमृशथ सततं कर्कशास्तार्किकाः किम् ।

वेदेर्नानागमैः किं गृह्यस्य हृदयं श्रोत्रियाः श्रोत्रशूलै-
दैर्द्यै सर्वानवद्यं विचिनुत शरणं प्राणसंप्रीणनाय ॥६॥

“O ye deluded philosophers ! why do you still persist obstinately in the quest for unity ? O ye angular logicians ! why do you still go about investigating with your noses in the dust ? O ye theologians ! why do you afflict the heart with scriptural recitations which pierce the ears like needles ? Leave these varieties and seek refuge in medicine, the one perfect science for the sake of giving happiness to all life.”

It was a popular maxim that a physician was a necessary element in any complete civic unit.

धनिकः श्रोत्रियो राजा नदी दैवस्तु पन्नमः ।
पन्नं यत्र न विद्यन्ते न तत्र दिवसं वसेत् ॥

“In a country where there is no man of wealth, no Brāhmaṇa well versed in the Vedas, no king, no river and fifthly no physician, one should not live even for a day”.

Here below is the Caraka's ideal of a physician—

य इमे कुचीनाः पर्यवदातश्रुताः परेष्टकर्मणो दक्षाः शुचयो जितहस्ता जिह्मास्मानः सर्वोपकरणक्तः सर्वेन्द्रियोपपन्नाः प्रकृतिज्ञाः प्रतिपत्तिज्ञाश्च ते ज्ञेयाः प्राणानाममिसरा हन्तारो रोगाणां ;

“They are well-born, of wide learning, of wide practical experience, skilful, pure, practised of hand, self-controlled, fully equipped with all the appurtenances (of healing), in full possession of their faculties, conversant with the normal course of nature, able to take prompt and appropriate decisions: these are to be known as the saviours of life and destroyers of diseases”.

The highest honor that a medical man aspired to was to become the king's physician. The qualifications needed for such title were many and difficult. Caraka lays down the qualifications thus:

सर्वरोगविशेषज्ञः सर्वकार्यविशेषवित् ।

सर्वमेव जतत्तदज्ञो राज्ञः प्राणपतिर्भवेत् ॥

च. वि. ६, १९

हेतौ क्लिप्ते प्रसमने रोगाणामपुनर्भवे

ज्ञानं चतुर्विधं यस्य स राजाहो भिषक्ममः ॥

च. सू. ९, १९

"The man who is acquainted with the characteristics of all diseases, versed in all therapeutic measures and conversant with the true properties of all drugs, is worthy of being made the custodian of the king's life. He who possesses the fourfold knowledge of etiology, symptomatology, therapeutics and prophylaxis of diseases is the best of physicians and deserves to be honoured by the king. (He is fit for being the royal physician)".

There can be no doubt that a true and learned physician must have earned the respect and patronage of society in all the ages past as he does at present and will continue to do for all time. He is the natural friend and guide of society and even the state has to consult him in conditions of grave dangers to racial survival arising from serious disease and lack of social hygienic and sanitary sense. He is the expert on health and his example and precept are valuable education to the society. Medicine may be practised as a trade till some new social revolution takes place when all medical aid becomes an organ of the state, but a spirit of humanity and broad sympathy with the ailing fellowman will ennoble and endear even the practitioner who makes more than a living from his profession. But the stupendous fortunes to the making of which medicine is now an easy means must come to an end. It takes the soul out of the most humane of professions and makes it almost a censurable avocation. Under enlightened conditions of social life, the healer is bound to reclaim his leadership as in the primitive society. He was then the priest and magic man, later on the prophet and the miracle worker of health, the inspiritor of the individual as well as of society, a guide and leader into the higher realms of physical and psychic soundness and integrity. He guides and helps humanity across the rough seas of disease and decrepitude into the heaven of health and long life. Let us repeat the noble lines from Vāgbhāṭa in praise of the supreme healer.

रागादिशोगान्धतानुषक्तान्शेषकायप्रसृतान्शेषान् ।

औरुक्क्यमोहारतिवाङ्मवान योऽपूर्वैश्याय नमोऽस्तु तस्मै ॥ अ. ह. सू. १, १

"Obeisance to that incomparable physician who destroyed the entire brood of psycho-somatic diseases such as passion and the like that perpetually afflict all embodied creatures and that give rise to the urge of desire, delusion and depression."

CHAPTER XIII

STATE AND MEDICINE

As the food, water and clothes make the primary necessity of every individual so also the healthful living occupies a very important place. Now in as much as public health depends upon every individual, it is no less dependent on the state also. Therefore it is, that medical aid forms an essential part in the administration of the State.

For the preservation of health, the State has first to look after the sanitation of the country by laying down rules as to where the rubbish of garbage should be thrown, where and how the gutters and the drainage system should work, where and how the quality of food and drink as well as that of vegetables should be preserved and how the infections should be avoided. Kautilya suggests the following line in this behalf.

दैवान्यष्टौ महाभयानि—अग्निदकं वायुदुर्मिक्षं मूषिका व्यालास्पर्शरक्षांसीति—तेभ्यो जनपदं रक्षेत् ।

“There are eight kinds of providential visitations. They are fire, floods, pestilential diseases, famine, rats, tigers, serpents and demons. From these shall the king protect his kingdom.”

पाण्डुभासे रथ्यायामष्टभागो दण्डः । पक्षोदकसन्निरेवे पादाः । राजमार्गे द्विगुणः । पुण्यस्थानो-
दकस्थानदेवगृहराजपरिग्रहेषु पणोत्तरा विष्टा दण्डाः । मूत्रेष्वर्धदण्डाः ।

“Whoever throws dirt in the street shall be punished with a fine of one-eighth of a Pana; whoever causes mire or water to collect in the street shall be fined one-fourth of a Pana. Whoever commits the above offences in the king's road shall be punished with double the above fines. Whoever excretes feces in places of pilgrimage, reservoir of water, temples and royal buildings shall be punished with fines rising from one Pana and upwards in the order of offences.”

त्रिपथीप्रतिकान्तमस्वर्गमरतिं वा प्रवेक्ष्य गाढप्रसृतमुदकमार्गं प्रसक्तं प्रचारं क्य करयेत् ।
तस्मादिकमे चतुष्पञ्चासत्पणो दण्डः ।

"From each house a water course of sufficient slope at a distance of 3 Padas or $1\frac{1}{2}$ Aratnis from the neighbouring site shall be so constructed that water shall either flow from it in a continuous line or fall from it (into the drain). Violation of this rule shall be punished with a fine of 54 Panas."

खातयावानप्रणाळीनिश्रेय्यवकरभागेर्विवाधायां भोगनिग्रहे च परकुञ्जमुदकेनोपपन्नो द्वादशपणो दण्डः। मूत्रपुरीषोपवाते द्विगुणः।

प्रणाळीमोक्षो वर्षति अन्यथा द्वादशपणो दण्डः।

"If a pit, steps, water-course, ladder, dung-hill or any other parts of a house offer or cause annoyance to outsiders, or in any way obstruct the enjoyment of others or cause water to collect and thereby injure the wall of neighbouring house, the owner shall be punished with a fine of 12 Panas. If the annoyance is avoidance of feces and urine, the fine shall be double the above. The water-course or gutter shall offer free passage for water, otherwise the fine shall be 12 Panas."

विमांसविक्रियिणश्च वामहस्तद्विपादवधो नवशतो वा दण्डः।

"When a person sells rotten flesh, he shall either have his two legs and one hand cut off or pay a fine of 900 Panas."

व्याधिभयमौननिषदिकैः प्रतीकारैः प्रतिकुर्युः। औषधैश्चिकित्सकाः शान्तिप्रायश्चित्तैर्वा तापसाः। तेन सरको व्याख्यातः।

पशुव्याधिमरके स्थानान्यर्थनीराजनं स्वदैवतपूजनं च कारयेत्।

"Such remedial measures as will be treated of hereafter, shall be taken against pestilences. Physicians with their medicines, and ascetics and prophets with their auspicious and purificatory ceremonies shall also overcome pestilences. The same remedial measures shall be taken against epidemics."

"With regard to cattle diseases, not only the ceremony of waving lights in cow-sheds shall be half done, but also the worship of family gods be carried out."

These being the preventive precautions and measures, the state has secondly, to pay attention to the curative measures. For

this purpose, the state has to establish and maintain hospitals, provide physicians—civil, military and veterinary, and surgeons, and also nurses and midwives. The health of animals was as important to the state as that of the people and for that purpose, every effort was made to render medical aid to them also. There were hospitals for the aged, the poor and the helpless, the children and the animals, and maternity hospitals for the pregnant women.

बालवृद्धव्याधितव्यसन्याशांश्च राजा विभूयात् ।

स्त्रियमप्रजातां प्रजातायाश्च पुत्रान् ।

कौ. अ.

“The king shall provide the orphans, the aged, the infirm, the afflicted and the helpless with maintenance. He shall also provide subsistence to helpless women when they are carrying and also to the children they give birth to.”

The state took great pains in growing, preserving and dispensing medicinal herbs, and severe punishments were inflicted on those who injured or showed cruelty to plants or to animals.

क्षुद्रपशूनां काष्ठादिभिर्दुःखोत्पादने पणो द्विपणो वा दण्डः । शोणितोत्पादने द्विपणः । कौ. अ.

“For causing pain with sticks etc., to minor quadrupeds, one or two Panas shall be levied; and for causing bleeding to the same, the fine shall be doubled.”

पुरोवनस्पतीनां पुष्पफलच्छायावनां प्ररोहच्छेदने षट् पणः । क्षुद्रशाखाच्छेदने द्वादशपणः । पीन-
शाखाच्छेदने चतुर्विंशतिपणः । स्कन्धवधे पूर्वस्त्राद्विदण्डः । समुच्छिन्नौ मध्यमः । कौ. अ.

“For cutting off the tender sprouts of fruit trees, flower trees or shady trees in the parks near a city, a fine of 6 Panas shall be imposed; for cutting off the minor branches of the same tree, 12 Panas; and for cutting off the big branches, 24 Panas shall be levied. Cutting off the trunks of the same, shall be punished with the first amercement; and felling the same shall be punished with the middlemost amercement.”

Moreover every protection was offered to men and animals against poison, carnivorous animals and serpents.

इण्डविष्टिकराधैः रक्षेदुपहतं कृषिम् ।

स्तेनव्यालविषम्रादैः व्याधिभिश्च पशुमजान् ॥

कौ. अ.

"He shall protect agriculture from the molestation of oppressive fines, free labour, and taxes; herds of cattle from thieves, tigers, poisonous creatures and cattle disease."

The state enacted laws for the sale of drugs, spirit and liquor, and for the post-mortem examinations and for the sexual contacts. Kaupilya mentions that:

कुटुम्बिनः कृत्येषु श्वेतसुरामौषधार्थं वारिष्टमन्यद्वा कर्तुं लभेरन् ।

"On special occasions, people shall be allowed to manufacture white liquor, Arishta used in diseases and other kinds of liquor."

विषहतस्य भोजनशेषं पयोमिः परीक्षेत । हृदयादुच्छृत्याग्नौ प्रक्षिप्तं चिटचिटीयदिन्द्रधनुर्वर्णं वा विषयुक्तं विद्यात् ॥ दग्धस्य हृदयमदग्धं दष्ट्वा तस्य परिवारकजनं वा दण्डावारुष्यादतिमार्गेत् ॥

"In death due to poison, the undigested portion of meal may be examined in milk. Or the same extracted from the belly and thrown on fire may, if it makes 'ciṭa-ciṭa' sound and assumes the rainbow colour, be declared as poisoned. Or when the belly remains unburnt, although the rest of the body is reduced to ashes, the dead man's servants may be examined as to any violent and cruel treatments they may have received at the hands of the dead."

वसति भोगापहारे भोगमहगुणं दद्यात् अन्यत्र व्याधिपुरुषदोषेभ्यः ।

"When in her own house, prostitute deprives her paramour of his enjoyment, she shall be fined eight times the amount of the fees, unless the paramour happens to be unassociable on account of disease and personal defects."

तीर्थसमवाये चासां यथाविवाहं पूर्वोक्तं जीवत्पुत्रां वा पूर्वं गच्छेत् । तीर्थगूहनागमे वण्णवतिर्दण्डः । पुत्रवती धर्मकामां वन्ध्यां सप्तं नीरजस्कं वा नाकामासुपेयात् । न चाकामः पुरुषः कुष्ठिनीमुन्मत्तां वा गच्छेत् । कौ तु पुत्रार्थमेव नृनं गोपगच्छेत् ।

"If many or all of them (wives) are at the same time in

menses, he shall lie with that woman among them after the menstrual bath whom he married earlier or who has a living son. In case of his concealing the fact of her being in menses or neglecting to lie with any of them after her menses, he shall pay a fine of 96 Panas. Of women who either have sons or are pious, or barren or bring forth only a dead child or are beyond the age of menstruation, none shall be associated with against her liking. If a man has no inclination, he may not lie with his wife who is either afflicted with leprosy or is a lunatic. But if a woman is desirous of having sons, she may lie with men suffering from such disease."

The state levied tax on herbs and drugs, and prescribed punishments for abortion, poisoning, rape and sexual crimes.

सूत्रवस्त्रताम्रवृत्तकंसगन्धमैषज्यसीधुपण्याश्चत्वारिंशत्कराः ।

"Those that trade in cotton threads, clothes, copper, brass, bronze, sandal, medicines and liquor shall pay 40 Karas".

न च प्राकाश्यमकामायां लभेत ।

"No man shall have sexual intercourse with any woman against her will."

मंथुने द्वादशपणः तिर्यग्योनिष्वनात्मनः ।

दैवतप्रतिमानां च गमने द्विगुणस्स्यूतः ॥

"When a senseless man has sexual intercourse with beasts he shall be fined 12 Panas; when he commits the same act with idols of goddesses he shall be fined twice as much."

Even the kings honored the medical profession and according to circumstances they gave presents to the physicians and nurses, and rewarded them in cash and kind, after long and serious illness, after victory in a battle and after a happy delivery.

Thus the physician and his profession were highly regarded and the state in no way lagged in helping them and thus contributed to the moral uplift and to the enlightened condition of the state laws by making medical aid available in its true sense.

CHAPTER XIV

QUACKS

At all times there have been quacks in every profession. But the most dangerous of them is the quack in the medical profession, as into his hands is entrusted the responsibility for life or for death. The society of the times depicted in Caraka, had a wholesome dread of the medical quack and these quacks must have been quite numerous considering elaborate manner Caraka describes them in, referring to their pretentious manners, speech and equipment. Setting out the difference between the good and learned physician and the ignorant quack, Caraka declares that in the hands of the former, diseases melt away like the "fairy city" while in the hands of the quack hundreds of lives are lost.

At the time of Caraka, the conditions of society seem to have been very favourable for the existence and flourishing of quacks. They seem to have gone about decked in the conventional garments of physicians and to have displayed lavishly all the appurtenances of the medical profession. Caraka refers to these quacks in varied circumstances, and the following extracts indicate the vehemence with which Caraka thought it necessary to condemn the quack and warn society against his attentions and mischief.

तस्माच्च मिषजा युक्तं युक्तिवाह्येन भेषजम् ।
धीमता किञ्चिदादिषं जीवितारोग्यकाङ्क्षिणा ॥

च. सू. १, १२७

"Therefore the intelligent man, who desires health and long life, should not take any medicine prescribed by a physician who is a stranger to the art of application."

कुर्यान्निपतितो मूर्खिन् सशेषं वासवाश्लिः ।
सशेषमातुरं कुर्यान्नित्वज्ञमतमौषधम् ॥

च. सू. १, १२८

"One may survive the fall of a thunderbolt on one's head, but one cannot expect to escape the fatal effects of medicine prescribed by an ignorant physician."

वरमाशीविषविषं कथितं ताम्रमेव वा ।
 पीतमत्स्यमिसन्तता भक्षिता वाऽप्ययोगुडाः ॥
 न तु श्रुतवतां वेषं विज्ञता शरणागतात् ।
 गृहीतमम्नं पानं वा वित्तं वा रोगपीडितात् ॥

च. सू. १, १३१-१३२

"It is better for the person who has put on the garb of the physician to quaff the venom of the cobra or to swallow heated iron balls than to extort food, drink or money from a man who is afflicted with disease and has sought his aid.

गन्धर्वपुरवन्नाशं यद्विकाराः सुदारुणाः ।
 यान्ति यच्चेतरे वृद्धिमाशूषायप्रतीक्षिणः ॥ १४ ॥
 सति पादत्रये ज्ञज्ञौ भिषजावत्र कारणम् ।

च. सू. ९, १४

"If the other three factors being given, serious diseases, demanding attention and treatment, are sometimes seen to vanish like a city of illusion and at other times to get aggravated, the cause is to be found in the physician who is wise in the first instance and ignorant in the second instance."

वरमात्मा हुतोऽङ्गेन न चिकित्सा प्रवर्तिता ॥
 पाणिचाराद्यथा चक्षुःज्ञानाङ्गीतभीतवत् ।
 नौर्मास्तवशेषाङ्गो भिषक् चरति कर्मसु ॥

च. सू. ९, १५-१६

"It is better for the quack to offer himself up in the fire than enforce his treatment on the patient. Like a blind man groping about with his hands in fearful uncertainty, or like a (rudderless) canoe left to the mercy of the winds, the ignorant physician proceeds in his work full of uncertainty and fear."

यदच्छया समापन्नमुत्तार्य नियतायुषम् ।
 भिषक् सानौ निहन्त्याशु शताभ्यनियतायुषाम् ॥

च. सू. ९, १७

"Emboldened by meeting with providential success in his treatment of a patient destined to survive (both the disease and his

ministrations) the pretentious quack hastens to death a hundred others whose tenure of life is not so definite'.

मिषक्छद्मचराः सन्ति सन्त्येके सिद्धसाधिताः ।

सन्ति वैद्यगुणैर्युक्तात्रिविधा मिषजो भुवि ॥

च. सू. ११, ५०

"Regarding the three kinds of physicians, three kinds of medical practitioners are found in the world; firstly, the impostors in physician's robes; secondly, the vain-glorious pretenders; and thirdly, those endowed with the true virtue of the healer."

वैद्यभाण्डोपचैः पुस्तैः पल्लवैरवलोकनैः ।

लभन्ते ये मिषक्छद्ममज्ञास्ते प्रतिरूपकाः ॥

च. सू. ११, ५१

"Those who by parading their medical paraphernalia, books, models, smattering of medical texts and knowing looks acquire the title of physician, are the first kind, viz., the ignoramuses and impostors."

श्रीयशोज्ञानसिद्धानां व्यपदेशादतद्विधाः ।

वैद्यशब्दं लभन्ते ये ज्ञेयास्ते सिद्धिसाधिताः ॥

च. सू. ११, ५२

"Those who by laying claim to association with persons of established wealth, fame knowledge and success, while they themselves have none of these things, arrogate to themselves the designation of physicians, are the vain-glorious pretenders".

मिषक्छद्मविश्वैवं व्याधितास्तर्कयन्ति ये ।

वीनसमिव संश्रित्य बने शाकुन्तिका द्विजान् ॥

श्रुतदृष्टक्रियाकालमात्राज्ञानबहिष्कृताः ।

वर्जनीया हि ते सृम्याश्चरन्त्यनुचरा भुवि ॥

च. सू. २९, १०-११

"Those who putting on the garbs of physicians, thus gull their patients, just as the bird-catchers in the forest (gull) the birds by camouflaging themselves in nets, such persons, outcastes from the science of healing, both theoretical and practical, of time and of measure, are to be shunned, for they are the messengers of death on earth."

Having warned against inviting their services, Caraka goes to describe the ignorance and hollowness of these pretenders and of how they avoid the presence and contact of the really learned physician, lest they be found out.

The quacks of medicine as those of all other professions, possess only the externals of the profession, and try to impress the ignorant by a smattering of the professional clap-trap of maxims and platitudes. They never have access to the sources of the science, nor practice in the application of remedies. They learn to mouth a few seemingly wise slogans and catch-phrases and make a show of skill that they do not possess. They make up their lack of wisdom by braggadocia and bluster. The following extracts from Caraka on these aspects of the quack are illuminating.

वृत्तिहेतोर्मिषड्मानमूर्णान्मुखेविशारदान् ।
वर्जयेदातुरो विद्वान् सर्पास्ते पीतमारुताः ॥

च. सू. २९, १२

"The discriminating patient should avoid these unlettered laureates, who put on the airs of physicians for the sake of a living; they are like serpents that have gorged on air."

शब्दमात्रेण तन्त्रस्य केवलस्यैकदेशिकाः ।
अमन्त्यल्पबलास्तन्त्रे ज्यायस्तेन वर्तकाः ॥

च. सू. ३०, ७४

"The men of little learning, the weaklings, are put into a flutter by the very sounds of the medical scriptures, like a bevy of quails at the mere sound of the bow-string."

पशुः पशूनां दौर्बल्यात् कश्चिन्मध्ये वृक्षयते ।
स सत्यं वृक्षमासाद्य प्रकृतिं भजते पशुः ॥

च. सू. ३०, ७५

"Sometimes an animal (which is not a wolf) taking advantage of the weakness of others of its kind, plays the wolf; meeting however with a real wolf, the creature reverts to its true nature."

तद्वदज्ञोऽज्ञमप्यस्यः कश्चिन्मौख्यसाधनः ।
स्वापवत्याप्तमात्मानमार्प्य त्वासाद्य भिद्यते ॥

च. सू. ३०, ७६

"In the same manner an ignoramus given to blatant displays, establishes himself as an exponent in the midst of others who are equally ignorant; meeting, however, with a true exponent, he is non-plussed."

बभ्रुर्गूढ इवोर्णामिरबुद्धिरबहुभुतः ।
किं वै वक्ष्यति संजल्पे कुण्डमेही जडो यथा ॥

च. सू. ३०, ७७

"The ignoramus possessed of little learning (but full of pretensions) is like a pole-cat hidden in its own bristles; what can such a one, comparable to a low-born idiot, say in a debate?"

सद्वृत्तैर्न विगृह्णीयाद्भिषगल्पश्रुतैरपि ।
हन्यात्प्रमत्ताद्येनादावितरांस्त्वाप्तमानिनः ॥

च. सू. ३०, ७८

"The physician should not engage in dispute with godly men, though they be of little learning, with a view to discomfit them; but one should not scruple to demolish by means of the eight-membered questionnaire, the others, who pose as experts."

दम्भिनो मुखरा ह्यज्ञाः प्रभूताबद्धभाषिणः ।
प्रायः, प्रायेण सुमुखाः सन्तो युक्तालम्भाषिणः ॥

च. सू. ३०, ७९

"The pretentious and obstreperous wiseacres are generally given to much and loose talk. The godly are generally fair-spoken and are circumspect and of few words."

It is interesting to note that the term applied to such a charlatan and ignorant cheat in Sanskrit is a Kuvaidya or Kuhaka; the latter meaning a cunning or sinful man. The English term of 'quack' having the same or similar connotation suggests its evolution from the original 'Kuhaka'. कुक्कः कृत्रहीनः परमविश्वासकारको मायावी । The English synonyms like pretender, charlatan etc, are reflected in this definition of the quack.

It is easy to infer the circumstances that gave rise to the abundance of quacks. The medical profession was among the professions held in great esteem in society. As we have already seen, the

physician held a high place in the society and was regarded as the guide and friend of the people. His emoluments in the profession were evidently considerable and aroused the envy of ambitious individuals who aspired for such a status but had not the equipment for it. Such naturally turned into quacks and acquiring the external accomplishments of manner, speech and professional catch phrases, imposed on the ignorant and gullible and made their fortunes. Such indeed are the quacks in every age, and the attention devoted by Caraka to them and their methods, and the passion with which he condemns their evil, are evidences of the prevalence in undesirable numbers of the members of this deceitful tribe

It is interesting to read Caraka describing the cunning tactics of the quack in snaring patients into his net, but, how he disappears at a critical stage of the patient.

"Tricking themselves out in the height of medical fashion, they walk the streets with a view to picking up practice. Immediately on hearing that somebody is ill, they swoop down on him from all quarters, and in his hearing speak loudly of their medical attainments. If a doctor is already in attendance on him, they make repeated mention of his failings. They try to ingratiate themselves with the friends of the patient by suave manners, knowing whispers and officiousness. They make it known that they accept little (by way of remuneration). On being entrusted with a case they look out on all sides repeatedly, trying to cloak their ignorance.

Finding themselves unable to check the course of the disease, they give it out that it is the patient himself who is wanting in the necessary appurtenances, in attendants and in self-control. When they realise that the patient is at death's door, they make themselves scarce and seek another neighbourhood. In the presence of uncultured people they brag about their adroitness in the most unadroit manner and like the ignoramuses that they are, they run down the learning of the savants. But if they sight a company of the learned, they slink away from a distance, like a roadster at the sight of a dark wood. If by any chance they happen to have conned a stray maxim, they constantly quote it in season and out of season. They can

brook neither being questioned nor questioning others. They dread questions as if they were the devil. People such as these, reck not for either teacher, disciple, co-student or disputant". (Caraka Sūtra 29, 9.)

We may conclude this study of the quack in the medical profession by the popular saying that obtained currency in much later times than Caraka wherein the quack is dubbed the elder brother of Yama, the god of death. In the West quacks are facetiously known as 'The Arms of the Honourable company of Undertakers,' which is akin in spirit to the Indian saying referred to above which runs thus:—

वैद्यराज नमस्तुभ्यं यमराज सदोदर ।

यमस्तु हरति प्राणांस्त्वं प्राणांश्च वनानि च ॥

'Salutations to you, O, elder brother of Yama ! Yama takes away only our lives; but you take away our lives as well as our wealth.'

The institution of quackery flourishes wherever there is a rigorous standard demanded of the genuine man of the profession, which is not within the easy acquisition of all people. Strenuous years of study and practice and then again approval by the state are needed for the profession. Naturally a host of impostors arise who secretly carry on their trade among the ignorant and the gullible. Caraka says that such quacks flourish and go about at large only at the connivance of the king (state). Thus a great responsibility rests on any civilized state i. e., to see that such ignorant and pretentious cheats are not allowed scope to work havoc among the common people. The ancient state in India, judged by the secret methods of the quack as portrayed in Caraka, seems to have fulfilled its responsibility in this respect in a laudable measure.



SOME ASPECTS OF LIFE IN CARAKA'S TIMES

INTRODUCTION

It was the great German Poet-philosopher Goethe that said, "If you would understand an author, you must understand his age." Most people will agree with us when we say that the meaning and spirit of this greatest of medical classics will become more intelligible and vitally interesting against the background of the context of life and things, and the ideas, the forms of thought, sentiment and behaviour that obtained and developed in their age. Though this is a work on medicine, it is not without interest to the general man, for medicine is one of those vital subjects that have a bearing on various general aspects of life. It has a light to throw on the food and clothing, the methods of education, the place of man and women in society, the pleasures people resorted to, on sex and marriage, the habits and addictions, the social pleasures and the religious practices pertaining to that age.

It is thus that the material for writing history is culled from the works on art, literature and particularly medicine. Even as the chronicles of general history provide data for the medical historian, similarly the chronicles of medical history and science throw considerable light on the facts and features of general life and history.

It needs the diligent and patient mind of the researcher to exhaustively investigate these ancient texts of medicine in the light of a historical perspective, to paint a complete picture of the social, economic and religious aspects of life in Caraka's age. We have contented ourselves under the present circumstances to pick up only the salient features obtained from incidental references in Caraka and to draw a probable picture of the conditions of life warranted by such references. It is hazardous to aver that our conclusions are exactly and completely true of the state of things obtaining several millenniums ago, yet we are certainly able to suggest the direction in which the truth might lie and thus guide the interested reader in his further and more detailed investigations in the realm. We are thus in a position to declare that a more intense investigation, in the light of and with the object in view we have suggested in these pages, is

bound to bear fruit and yield the historian rich material for depicting the social, economic, religious and cultural aspects of life in the India of more than two thousand years ago. We are sure that the following outline of the picture of life then, built upon the salient features mentioned in the Caraka Samhitā and allied works, will greatly interest the general reader.

CHAPTER I

THE CEREMONIALS OBSERVED IN CHILDHOOD

The man's journey from cradle to grave consists of so many interesting stages of activity that a picture of this journey as it was in ancient India will give us a clear and connected view of life the ancients actually lived, the manners and customs and the ideas and ideals which motivated people's activities

Soon after the child was declared born into this world and he had passed through accoucheuse's routine procedure of cleansing and the severing of the umbilical cord—the last connecting link of the fetus with the mother's body, the first socio-religious ceremony he had to pass through was Jātakarma (जातकर्म) ceremony. (च. शा. ८, ४६)

For the first ten or twelve days special precautionary and protective measures were taken including शान्ति, स्वस्ति etc., i. e. peace, benedictory rites etc., for the child as well as for the mother. (च. शा. ८, ४७)

On the tenth day the naming ceremony or नामकरणसंस्कार was performed. The procedure followed was as under:—

The mother and the new born child bathed in water treated with fragrant drugs; put on thin clean garments, light and variegated ornaments and received the blessing of Brahmins. After this the child was given two names by the father, one denoting the constellation under which it was born and the other of intended meaning. The name was not selected in a haphazard way but it had to conform to several prescribed rules, one of which being, the name conforming

to the constellation at birth, was in order to enable to cast his horoscope from the mere name of the child. (च. श्र. ८, ५०)

After this ceremony a thorough examination was made of each individual part of the child's body to determine the life-span of the child. This was based on the physiognomical and anthropological measurements.

Hair, skin, head, forehead, joints, ears, eye-brows, eyes, nose, mouth, tongue, palate, voice, lips, jaws, neck, chest, collar, spine, breast, thighs, arms, fingers, navel, buttocks, wrist, ankles etc., were examined to arrive at the appraisement of the measure of the life-span of the new born child. (च. वि. ८-५१)

The mother's milk was considered to be the best for a child but human nature was not very different then from now and it seems the custom of having a wet-nurse (दासी) at least in the aristocratic class was prevalent. Great care was taken in selecting a wet-nurse. A minute and thorough examination was carried out not only as regards the age, caste, colour, family, race, character etc., of the woman but even of the size and shape of the breasts and the nipples and of her milk.

The detailed care and attention they paid to the selection of the wet-nurse indicates the importance they attached to the influence of the nurture on the qualities of the future man.

The life-span is a continuously progressive process of development but for practical purposes it can be divided into fairly well-marked divisions. Caraka describes three broad divisions of life viz., childhood (बाल्य), middle age (मध्य) and senescence (जीर्णवस्था). (च. वि. ८, १२२)

The first stage or childhood (कुमारवस्था) lasts upto 16 years, followed by adolescent stage or बौवन lasting upto 30 years. The second is the middle or मध्य stage lasting for a period of 30 years from the age of 31 to 60 years. Then follows the third and the last stage of senescence or जीर्णवस्था which gradually carries the man to the grave.

Childhood

In princely and aristocratic families special residential nursery quarters were devised. They were constructed to accommodate

old and experienced people and medical men residing with the child in order to take care of his health and upbringing.

The nursery was provided with toys. Scrupulous cleanliness was observed regarding the bed, clothes etc. Fumigation was one of the means to ensure health and cleanliness and ventilation arrangements were not at all neglected. The child was to put on jewels (मणि) or herbs on his body as a protective and prophylactic measure. The prevalence of the Atharva concepts and manners in the society of the period is clearly indicated by this practice of putting on talismans. (च. शा. ८, ६२)

The articles worn by the child as talismans were gems tips of the right horns of a live rhinoceros, deer, gayal and bull; herbs like the Aindri etc., the herbs Jivaka and R̥ṣabhaka, as also all such articles as the Brāhmaṇa, specialised in the Atharvaveda, recommended.

In addition to the utmost cleanliness prescribed for the child's surroundings, extra care for perfect and healthy development of mind and body was taken. Special branch of medicine was evolved to treat and take care of the child in health and disease. It was one of the parts of Octopartite Āyurveda (अष्टाङ्ग आयुर्वेद).

Special medications were prescribed to increase the resistance power and vitality of the child. (च. शा. ८, ६६)

The child was not to be frightened by the elders in the name of imaginary goblins or ghosts.

The child was thus reared through childhood to youth under ideal conditions—physical and psychological.

In the sixth or the seventh month after the child's birth, the child had to undergo the ceremony of ear-boring, the ceremony of Karmavedha (कर्णवेध). This was an essential religious ceremony for both the male as well as the female child to undergo. Suśruta describes the ceremony thus.

"In the sixth or the seventh month of the child's age, in the

bright fortnight, in an auspicious day, Karana, Muhūrta and constellation, having performed the auspicious ceremonies of Maṅgala and benedictory rites, and seating the child on the lap of the father, the wet-nurse or other attendant, on pacifying and cheering the child by holding up to its view the toys and other play-things, the physician should bore the ear in the centre which is by nature meant for boring and which is revealed by the exposure to the sun's rays. He must use a needle for a small hole and a probe for a larger one. The boy child must be bored in the right ear first, while the girl child should be bored in the left ear first." (Suśruta Sūtra. 16. 3)

CHAPTER II

THE ROUTINE OF DAILY LIFE

Man gets up rather early in the morning and finishes his शौचक्रिया or the purificatory process of excretion and bath. Then follows his daily procedure. This he modifies in every season, his diet, dress and behaviour. Twice or thrice in a year he undergoes the cleansing process of his internal system by cleansing all the internal passages possible of approach and then he takes a regular course of medications of Rasāyana and Vājīkaraṇa whose action is rehabilitation or वयःस्थापन i. e. prevention of aging of the body, senses, organs, mind and vital strength which helps him to live for the longest possible span of life for him immunizing him against adverse environmental circumstances.

His moral and spiritual life can best be inferred from the passage of आचाररसायन given in the text. (च. च. १/१, ३०-३५)

Thus he fully enjoyed the life fulfilling the four fold purpose thereof viz., धर्म, अर्थ, काम and मोक्ष. The peculiarly oriental luxurious life he lived was unrivalled elsewhere and yet the mode of living made the people around him happy. युतदया or the universal spirit of kindness always remained dominant in his activities. He had three springs or दृष्ट्या of life. Firstly his own bodily existence, secondly

wealth and thirdly परलोक or the life hereafter. But all these motivating factors were kept in equilibrium. He knew how to live happily for himself and he believed in making others happy. The Karma (कर्म) theory is nothing but the spiritual or moral law equivalent to the physical law of actions and reactions being always equal and opposite. Karma (कर्म) is the action done and when any thing is done, the reaction is bound to follow. He was ever conscious to obey these laws which he himself had conceived and found them working in nature.

The essence of the concept of Āyurveda for the man is given in Sūtra-sthāna chapter XXX.

Life In General

To understand the rationale of each endeavour and activity of man's life in ancient India, one should view it in its proper setting of the concept of life the Āryans held as well as the purpose and province of Āyurveda or the science of life evolved by the Āryans. 'Āyus' or life, to the Āryans, was not merely the mass of material body or the body with a sparingly considered mind tolerated as inseparable addenda, but to them life was the specific conglomeration of body, senses, the mind and spirit. (शरीरेन्द्रियसत्त्वात्मसंयोगो धारि जीवितम् । च. सू. १, ४२)

Again life was not just a purposeless accidental phenomenon to be wondered at, to be frittered away as it came, but it had a special purpose of achieving virtue, wealth, enjoyment and salvation, to go one step higher on the ladder of creative evolution. With such a vast field for progressive activity and purpose, it was essential to maintain life not only in a disease-free condition, but in perfect positive health of body mind and spirit so that the desired success in the fourfold purpose of life could be fully attained.

धर्मार्थकाममोक्षानामारोग्यं मूलमुत्तमम् ।

च. सू. १, १५.

The province and purpose of the science of life was primarily to teach how to lead a good, long and happy life. Thus greater importance was attached to the healthy condition of all the constituents of man viz., body, senses, mind and spirit to enable him to lead a good, benevolent and happy life. As such the science of life gave primary consideration to the maintenance of positive health and

only secondarily it considered the curative measures which were needed occasionally to alleviate the temporary setbacks to health.

(Caraka Cikitsā. 1. 4)

Although general rules were prescribed for the maintenance of normal health and for the treatment in diseased condition, great stress was laid on the individual and his peculiar constitution. The word *Swastha* (स्वस्थ) is significant of this recognition of individuality denoted by the term स्व which means one's own peculiar constitution.

The general rules laid down were to be applied with necessary modifications and alterations according to the individual constitution which a man acquired from his very birth or even from previous to it i. e. from the moment the conception took place in the mother's womb.

समपित्तानिर्लकृताः केचिद्भ्रमादिमानवाः ।

इत्यन्ते वातलाः केचित्पित्तलाः श्लेष्मलास्तथा ॥

च. सू. ७, ३९

And so the regimen of conduct and food for the maintenance of health should be devised in accordance with his constitution.

विपरीतगुणस्तेषां स्वस्थवृत्तेर्विघटितः ।

समसर्वैरसं सात्त्वं समन्नातोः प्रशस्यते ॥

च. सू. ७, ४१

Personal Hygiene

Daily routine—The greatest importance is attached to diet which ought to be taken in proper measure both in quantity and quality. The first of the four chapters devoted to personal hygiene begins with the following aphorism: मात्राशी स्यात् (च. सू. ५, ३) 'One must eat in measure'. To understand the problem of diet and nutrition as described in *Āyurveda*, one must be acquainted with the peculiar concept of *Āyurveda* of grouping food and drug in one category. The only difference between food and drug being that the former has more of mass while the latter has more of potency.

वीर्यप्रधानमौषधं द्रव्यं तथा रसप्रधानमाहारद्रव्यं च ।

The detailed description of food and factors concerned with it will be given later on. Food is described and considered in the same way as the drug i. e. the materia medica of food is equally important with the materia medica of drugs.

The following articles of diet have been recommended as wholesome and fit to be included in the daily diet.

षष्टिकञ्चाल्मिमुद्रांश्च सैन्धवामलके यवन् ।

आन्तरीक्ष षड् सर्पिर्जातुलं मधु चाभ्यसेत् ॥

च. सू. ५, १२

No definite time of rising in the morning is mentioned in Caraka, but the general trend as found in other texts seems to get up early in the morning. After performing the daily morning ablutions the person must strengthen the tone of his various senses; organ of sight by daily use of collyrium, organ of smell by a course of nasal drops, organ of taste by oil-gargles, organ of hearing by oil ear-drops and skin by oily massage of skin of head, body and feet. By strengthening the skin the resistance power to external injury increases and stabilizes the power of the whole body especially its musculature.

The vigour and vitality of man underwent following variations in different seasons. In the beginning and the end of the period of absorption and liberation respectively the body vitality is at its lowest. In between these periods it is moderate and in the end of the former and beginning of the latter the body vitality is at its highest.

This statement of Ayurveda will be an interesting study to research scholars to compare the incidence of disease in different seasons or months in India. In the cold season, the gastric fire gets stronger and the climate is cold, so one should have one's food, clothing, residence, sex-relations etc., in accordance with it. In the summer all these are to be changed in order to suit the increased atmospheric temperature. Rainy season has its own peculiarities. Thus man should practise varied measures of personal hygiene in different seasons.

There are special instructions laid down for adjustment from one season to the next. This withdrawal from one habituation to the

other was done in a special way as may not disturb the working of the body.

Physical exercise is advised to be practised by every man according to his constitution and strength. A special system of psychosomatic exercise was evolved and practised by yogis to develop the controlling power on involuntary musculature of the body in addition to the stabilizing power and tone of voluntary musculature.

There is an interesting classification of psychic and somatic urges of the body experienced by man in his daily life. Prohibitive injunctions were laid down to ensure non-suppression of the somatic or natural urges viz., urges for micturition, voiding feces, seminal ejaculation, flatus vomiting, sneezing, eructation, yawning, and of hunger, thirst, tears, sleep and deep breath. Equal stress was laid on the suppression of psychic urges which were injurious to his mental and spiritual well-being.

These psychic urges requiring to be suppressed were grief, greed, fear, anger, vanity, imprudence, jealousy, excessive attachment, malice and any activity of mind, speech or body which would hurt another creature, specially falsehood, theft, adultery and violence.

Another important fact in Āyurveda is that unless the body is kept scrupulously clean and free from toxic or morbid material, the procedures for revitalizing and strengthening it, will not be efficacious as the dirty cloth will not take proper colour.

निर्मले वासपि सुपरकल्पिते भजनं समुद्रितुण्यनिपातादेव रागमग्निर्वर्तयति । च. शा. ८, १७

Thus cleanliness was given supreme importance. Here below we give various items of daily hygiene recommended by the writers of Āyurveda.

दन्तधावन.....or teeth-cleansing.

जिह्वानिलेखन....or tongue-scraping.

आस्यधारण....or mouth flavoring.

परिमार्जन.....or friction-cleansing.

स्नान.....bath or the general washing.

पादादिशौचायान...or cleansing of feet etc., after all excretory processes.

All these are more or less the specialized procedures evolved particularly in India in view of its climatic and other needs. Cleanliness

of the body, externally as well as internally as also of the mind was regarded as the complete process of personal hygiene in those days.

A person was enjoined to put on clean apparel, to use fragrant articles and garlands and to decorate himself with jewels and ornaments. He put on shoes, carried an umbrella and stick; he put on a light turban and remained ever vigilant in the care of his body.

There were three classes of activity which were regarded as violations of rules of health. They were called *प्रज्ञापराधाः* or volitional transgressions. Of them over-use, under-use or misuse of the mind, directly or indirectly, led to vitiation of mental or spiritual health. This all-comprehensive concept of *प्रज्ञापराध* led to the evolution of ethical, social and humanitarian codes of Conduct. Caraka laying supreme stress on psychic health, appended a *Sadvṛtta* (सद्वृत्त) or the right life to *Swasthavṛtta* (स्वस्थवृत्त) or personal hygiene. This inculcated discipline of mind and senses and regulation of the moral life so as to accord with the happiness and good, not of the individual merely but of the society as a whole.

Personal hygiene as enjoined in *Āyurveda* is thus physical, social and universal in its conception and application, and comprehends a physical, mental and ethical frame-work of life. It is an entire way of life that *Āyurveda* expounds embodying philosophy, ethics and morality, as also individual and universal health.

The whole of the 8th chapter of *Sūtrasthāna* is devoted to details of how a man should live in society. It gives a clear picture of the rules and modes of social behaviour.

The general rules were the same as are observed today. We shall narrate in brief some of the customs prevailing at that period.

Gods, cows, *Brāhmins*, preceptors, elders, adepts, teachers, guilds and king were held in great respect.

The sacrificial fire was held sacred and meticulous care in observance of cleanliness was enjoined in the performances of the ceremonies. Special incantations in honour of fire, wind, water, *Viṣṇu*

and Indra were to be sung. The man was desired to be devoted to sacrifices (होता, यज्ञ...बलीनां उपहर्ता). Offerings to the manes were given. A dead body was treated with great respect. One should be given to salute acquaintances in the public places and squares of the town. Tutelary tree, temple, totem tree, crematorium and the scaffold were to be held in esteem. Hospitality to guests was one of the prime duties enjoined on a house-holder. Company of persons who were irreligious, disloyal to the king, arrogant, depraved, who practised feticide and who were mean and wicked, was prohibited. Drinking, gambling and prostitution were prohibited. Putting on the body of incanted herbs or jewels as a protective measure was widely practised. Man's daily cleansing consisted of bathing twice a day, hair-clipping thrice a fortnight, and his dress regulations, his general behaviour as regards speech, social manners, thought and nature, his social code regarding dinner, manners, sex-hygiene, holidays and days of work; all these are minutely described.

The universal, progressive and catholic spirit of Caraka becomes quite manifest when one finds at the end of the chapter VIII, Sūtra-sthāna, verse 34.

यच्चान्यदपि किञ्चित् न्यादनुष्मिह पूजितम् ।

इत्तं तदपि चादेयः तदैवाभ्यनुमन्यते ॥

"Whatever other observances there may be that are not spoken of here, provided they are good are always to be welcomed in the opinion of Ātreya."

The Springs of activity or the pursuits of life derived their origin from the three goals which a man aspired to achieve. They were the pursuit of life, the pursuit of wealth and the pursuit of the other world. (प्राणेषणा, धनैषणा, परलोकैषणा. च. सू. ११. ३)

From among these pursuits, the pursuit of life is given priority. This required main attention in the constant preservation of positive health and the immediate correcting whenever there is the slightest disturbance, of the bodily health.

Next importance was attached to wealth. A life devoid of

wealth was considered a wretched life and so every man was asked to do some work and earn his livelihood and if possible opulence. The rules of selection of work or profession tell us of the social concept of good and bad profession.

Agriculture was considered the best of professions, next came the rearing of cattle, next to it in order of preference came trade and the last was service. A man was to select any of these professions, or any other that was not disapproved of by the righteous. (च. सू. ११, ५)

Ancient society seems to have been rather strict as regards the selection of one's profession. Caraka lays down a definite statement as under:—

वृत्त्युपायान्निषेवेत ये श्युर्धर्माविरोधिनाः ।

शममध्ययनं चैव सुखमेवं समश्नुते ॥

च. सू. ५, १०४

‘One should have recourse to such means of livelihood as is not contrary to the dictates of religion and one should be devoted to peace and studies. Doing this, one attains happiness.’

The third and the last pursuit was परलोक or the other world. There existed many and diverse schools of philosophy, some exclusively materialistic, others spiritualist, and some that were believers in nature or natural occurrence, others in a creator and some in parental creation and so on

The development of so many diverse concepts, each supported by plausible reasoning, is significant of the high intellectual level of the times. It resulted in one permanent benefit to the world for it evolved the first postulates of scientific method.

Caraka taking up the question of the other world or the survival of the spirit evolves the principles of scientific investigation and describes each method of knowledge giving it its proper value and place.

The concept of the other world (परलोक) is based on the concept of continuity of the soul, and the influences of action in past lives on future periods of life. This view of life taken at its face value would, it be thought, negate the necessity of any human effort or endeavour

to counteract what is predestined as a result of previous actions.

But here Caraka puts forward another theory where past deeds are classified into three categories, mild, moderate and strong or severe. Manly endeavour can counteract the mild type of Karma i. e. past deeds and can get over them safely, and thus justifies the necessity of therapeutic endeavours and activities of Āyurveda.

देवं पुरुषकृतेण दुर्बलं ह्युपहन्यते ।

देवैन चेतस्त् कर्म विशष्टेनोपहन्यते ॥

च. वि. ३, ३३

He, no doubt, admits man's inability to counteract the stronger effect of past actions which he has to inevitably suffer in this life.

Personal Regimen

The six well-defined seasons with their climatic variations are peculiar to India and this peculiarity has been given full cognisance in the science of life, Āyurveda. This classification is an interesting study to the student of physical geography as the description gives many suggestive data regarding directions of wind, rains etc., and how the seasonal variations are brought about by these factors. The descriptions given in different text-books regarding the flora and fauna and natural scenery observed in each season provide the research scholar with definite clues regarding the region referred to. To the medical student as to the common man, these variations had great importance as they led to variations in his bodily functions and vitality and also because they affected the quality and potency of the articles of food and medicine resorted to.

There were special directions laid down for adjustment and habituation from observance of one season to another. The ancients knew and valued the science of developing internal homeostasis of the body and to increase the resistance power of the body, i. e. to develop immunity, against the further incursion of disease or the extremes of different climes, which shows that they travelled to far places of varying climes and seasons and were conversant with the

periodic incidence of various diseases. (व. सू. ६, ५०)

But platitudes and practice never completely coincide. In spite of all the vigilance observed in the execution of the rules of personal, daily and seasonal regimen, the ever-active man was liable to commit errors, negligence and indifference and the internal homeostasis would be disturbed.

This disturbance of homeostasis was required to be brought to the normal state at least thrice a year.

This is one of the greatest contributions of Āyurveda. It has definite methods and procedures laid down for internal cleansing of the whole body through all its excretory channels. And all the toxic or harmful substances accumulated in the body was got rid of once in every four months. The Āyurvedist is not satisfied with this mere cleansing but he knows that the delicate machinery of the body suffers wear and tear and becomes deteriorated in its functional capacity. With this in view there have been formulated marvellous procedures of revitalization for regaining the perfect homeostasis, and in rejuvenating the body and in increasing its powers of resistance to disease and of retarding the process of aging, the five verses in the seventh chapter of Sūtrasthāna give a vivid picture of this cleansing and revitalizing procedure. (सू. ७, ४६-५०)

For detailed descriptions of these procedures, the reader may refer to Sūtra. XIII for oleation therapy, Sūtra. XIV for sudation therapy and Sūtra. XV and XVI for purificatory therapy.

There are stronger measures as well as mild ones prescribed for different classes of people. The courses of medication in that group of drugs which were termed Rasāyana (रसायन) were prescribed for a particular period and strict regimen was to be observed regarding diet and behaviour during this period. One feels astonished when one finds that emblic myrobalans that were picked up directly from the tree were highly valued. Here we get the empirical concept of vitalizing element (vitamins of modern science) in the selection of fresh emblic myrobalans. And here is a description of the action of this special course of Rasayana.

वीर्यमायुः स्मृतिर्मेधामारोग्यं तृणं वयः ।
 प्रभावास्वरोदार्यं देहेन्द्रियबलं परम् ॥
 वाक्किं हि प्रणतिं कर्तुं लभते ना रसायनात् ।
 लाभं पायो हि शस्त्राणां रसादीनां रसायनम् ॥

वि. १-(१) ७-८

“Long life, heightened memory and intelligence, freedom from diseases, youth, excellence of lustre, complexion and voice, optimum strength of body and sense, utterance that always gets fulfilled, the reverence of people, body-glow—all these does a man obtain by the use of vitalizers. The vitalizers are so called because they help to replenish the vital fluids of the body.”

CHAPTER III

DRESS AND CLOTHING

The most obvious feature of any stage of social advancement is the dress and clothing represented by it. In the time delineated in the Caraka Samhitā, there is already in use a surprising variety of clothing both for purposes of therapeutics and general habiliment. Both in the Caraka and Suśruta Samhitās the material used in dress and in bandaging of wounds is drawn from skins, silk, linen and other vegetable fibres, bark cloth, woollen cloth etc.

अन ऊर्ध्वं व्रणबन्धनद्रव्याप्युपदेक्ष्यामः तथया-क्षौमकापांसविकुलकौशेयपत्रोर्णवीनपट्टवर्मान्त-
 वैल्कलावावृशकलताविदलरज्जुतूलफलसन्तानिकालौहानीति ।

सु. सू. १८, १९

क्षीतेषु संवृत्तं सेव्यं यानं जयनमासनम् ।
 प्रावारजिनकौशेयव्रेणीकुयकास्तुतम् ॥

च. सू. ६, १५

All cloth was classified into two categories that which is of a hot potency and that which is of cold potency. Skins, wool etc., were regarded as of hot potency while silk, cotton and linen etc., were of cold potency. We give below the words used to represent the various kinds of fabrics used in clothing.

1. क्षौम.....Linen.
2. कापाञ्च.....Cotton cloth.
3. आविक.....Wool cloth.
4. दुकूल.....Bark fabric.
5. कौशेय.....Silk cloth.
6. पत्रोर्ण.....Plant-wool.
7. चीनपट्ट.....China silk.
8. चर्म.....Skin.
9. अन्तर्द्वक.....Inner bark or pith.
10. तू-फल.....Silk cotton etc.
11. प्रावार.....Rugs etc.
12. प्रवेणी.....Jute and other fibres.

All clothing was also classified as light and heavy and utilised suitably to the needs of therapeusis as well as of habiliment in accordance with season and circumstance. We find also that garments were coloured in accordance with the prescriptions of religion and social convention. Thus a general practitioner of medicine was always required to wear clean and white raiment while the student who went to a preceptor to be initiated into the science was required to wear a brown-colored garment.

जीवनखरोम्णा शुचिना शुक्लवस्त्रपरिद्वितेन.....विशिखानुप्रवेष्टव्या ।

सु. सु. १०, ३

मुण्डः कुतोपवासः स्नातः कषायवस्त्रसंवीतः.....उपतिष्ठस्व ।

चि. वि. ८, ९

The Kuthaka (कुथक) is a woollen blanket of variegated colors. The arts of weaving and dyeing were already highly developed though there is no mention of tailored clothing. There is mention of sewing in the sense of mending torn cloth (सूत्रीविप्लविकं कन्यासीवनहेतोः च. शा. ५, १२)

The mendicant is expected to carry housewife for mending his blanket. As regards the mode of dressing, it is evident there was generally a two-piece suit, one lower cloth and one upper cloth. Though a man may divest himself of the upper garment in the course of his daily avocations, yet when he is in society or when he

approaches his preceptor for study or when he performs religious and sacrificial ceremonies, he must wear the upper garment.

अथ शुचये कृतोत्तरासंवाय.....गुरुहृदिशेत्

सु. सू. ३, ५४

The following may be regarded as the general items of dress prevalent then.

1. कौपीन.....Underwear or the genital strip.
2. वटीवेष्टनम्.....The waist cloth or the nether garment.
3. उत्तरीयम्.....The upper garment.
4. कन्या.....A thick cloth folded and worn on the shoulder specially by mendicants.
5. शिरोवेष्टनम्....Turban or head-covering.

The physician, of course, was required to carry a stick and to wear shoes in addition to the sartorial equipment. (सु. सू. १०, ३)

The use of skins of animals to sit upon was a common usage in those times. Even the scriptural texts prescribe the deer skin for the Brāhmin and other animal skins of lesser gradation for the Kṣatriya and Vaiśya. But on special occasions such as celebrating the birth of a son, Caraka prescribes special skins for seating. He prescribes the white bull-skin for the Brāhmin, the skin of a tiger or other ferocious animal for the Kṣatriya and the skin of a spotted deer (रुक्) or sheep for the Vaiśya. (च. सा. ८, १०)

As regards the preference in colors, pure white was the color of general dress of all classes. The yellow or the brown colors were prescribed on special and ceremonial occasions and on persons under religious vows such as the Brahmacārī student and the Saṃnyāsi (the recluse). The red color is conspicuous by its absence in daily life. It was regarded as inauspicious. Its appearance in life or in dreams was regarded as an ill omen. (च. सा. ४-८; इ. ५, १०-११)

There was seasonal variation in the dress. Thin cotton and silk fabric being worn in the hot months while thick cloth of wool, skin or other warm material was worn in the cold months.

Tailoring as an art had not yet made its appearance, for there is no mention anywhere in these *samhitās* in question of tight fitting garments such as came into vogue in later days.

But cleanliness in dress and person was greatly valued and one is warned not to use the garments used by another. Besides, after a bath one should not put on the discarded garments again nor wipe the head or body with the cloth which one has tied while bathing.

न स्नानशाटव्या स्पृशेत् उत्तमाङ्गम् ।

च. सू. ८, १९

Thus it is evident that a high degree of sanitary sense was prevalent then as regards the use of clothing, combined with an aesthetic appreciation of sartorial form and color.

CHAPTER IV

THE USE OF WINE

The chapter on the treatment of intoxication (alcoholism) in the *Caraka Samhitā*, starting with an eloquent eulogy of the potency of wine, describes thus the benefits it can bestow if taken in due mode.

“That which endows the gods with choicest prosperity in the form of ambrosia, the manes in the shape of ‘Swadhā’ and the twice-born in the form of “Soma,” that which is the splendour, might and the wisdom of the Aświn twins, that which is the power of Indra, that which is the “Soma” prepared in the “Sautrāmaṇi” sacrifice, that which is the destroyer of sorrow, unhappiness, fear and distress, which is powerful and which itself turns into and causes love, joy, speech, nourishment and beatitude, that which has been praised as the joyful wine by the Gods, Gandharvas, Yakṣas, Rākṣasas and mortals, should be taken in the enjoined manner.” (*Caraka Cikitsā* XXIV, 7 10).

Subsequently the chapter describes the manner in which a person should address himself to the task of quaffing the precious liquid.

"Having attended to the internal and external needs of the body and having bathed and painted himself with fragrant sandal, a person must wear clean clothing along with ornaments and fragrances suitable to the season. Then decking himself with garlands of variegated flowers and with jewels and ornaments, he should worship the Gods and the Brāhmanas and touch the most auspicious articles. Seating himself comfortably in a sitting or lounging position on a well made bed with pillows, in a spot scattered with flowers that are best suited to each season and fumigated with fragrant smoke he should drink wine always in vessels of gold or silver or vessels set with precious stones or other vessels clean and well shaped. He should drink while being shampooed by clean, loving, beautiful, young and well trained women dressed in fine clothes, jewels and flowers suitable to the season. He should eat while drinking, green fruits and salted fragrant flesh and other sauces agreeable to the wine and proper to the season, and the fried flesh of many kinds of creatures of the land, water and the air and many kinds of puddings made by expert cooks. He should drink, having before prayed to the gods and having first received their grace and having poured the libations of wine on the earth mixed with water for the desiring spirits" (Laraka Cikitsā XXIV, 11-21)

Such eulogistic reference to the potency of wine and so elaborately painted method of courtship of wine could not be regarded as the outcome of mere scholarly powers of portrayal without its foundation in real daily life of the times depicted. On the contrary that indicates the common prevalence of the pleasure resorted to by the small and the great each in the measure and the mode that were possible within their means. The great amount of detail in regard to the method of indulging in wine and the close observation of its effects in the various stages of intoxication and the social and therapeutic uses to which wine can be put, all bear unmistakable testimony to the common prevalence and opportunity of the use of wine.

The pharmacological sources of wine are described in the very beginning of the treatise and no less than eighty varieties of wines and brews are described therein. Edible grains such as wheat, barley and rice and the roots, leaves and flowers, fruits and bark of

plants as also sugar, gur etc., are the sources mentioned of these wines and brews. (Caraka, Sūtra XXV, 49).

Wine is classified into the varieties that are provocative or alleviative of the three pathogenic factors of Vāta, Pitta and Kapha and each individual, be he in health or in disease, is to take wine in the proper mode suitably to his constitutional and pathological conditions respectively.

The habitual usage of wine by both men and women is easily discernible in view of the circumstances in which wine is contra-indicated. Women when they are pregnant are prohibited from taking wine and intoxicants.

Yet in spite of the common prevalence of the use of wine, as it has been in all times, the ideal was to abstain from its use altogether. Caraka declares (Cikitsā XXIV-206) that he who abstains from drink lives free from distempers both of the body and of the mind.

From the point of view of medicine, the proper and measured use of wine has been greatly valued. The benefits accruing from such a use have been laid down in very emphatic manner after first condemning its use in improper measure and describing the ill effects that flow from such abuse. This is one of the most striking passages in the book and illustrates the liberal and scientific spirit of the treatise.

"For all men all that which is contributive of well-being in this life and the other, and bliss in that higher life of liberation, is established in the perfect tranquility of mind. Wine causes great agitation to such a tranquil mind, like the strong wind that shakes the trees on a bank. Ignorant men who are addicted to and are blinded by intoxication and overcome by passion and ignorance, consider the intoxicated state, which is a greatly morbid and diseased condition, to be a state of happiness. These men, enslaved and blinded by alcoholism, are deprived of wisdom and Sāttwic qualities and are lost to all goodness. Wine is also the cause of great delusion, fear, grief, anger and death as well as insanity, toxicosis, fainting, epilepsy

and convulsions. When a man is deprived of his very memory, then every thing that follows upon it is necessarily evil. Thus those who know the evils of drink condemn the habit of drink strongly. True and undoubted indeed are these great evil effects, described about wine, if it is unwholesome or taken in excess or taken disregarding the prescribed regulations.

But wine, by nature, is regarded as similar to food in its effect. It is productive of disease if taken in improper manner, and is like ambrosia if taken in proper manner. Food, which is the life of living creatures if taken in improper manner destroys life; and even poison, which by nature is destructive of life, if taken in proper manner, acts as an elixir. Wine taken in proper manner soon gives exhilaration, courage, delight, strength, health, great manliness and joyous intoxication." (Caraka Cikitsā XXIV, 52-61)

The effects of wine and the intoxication resulting therefrom have been divided into three stages. The first stage is one of general exhilaration, when the senses are stimulated and all the mental perceptions are heightened, and lead to a pleasurable termination. The second is the stage of delusion when the hold on mental co-ordination is loosened and man becomes a victim to folly and crime. The last stage is that of utter stupefaction when man becomes unconscious and falls down prostrate like a broken beam of wood when man, though alive, is like one dead.

Caraka argues that in this stage the drunkard lies frustrated of the very object of his habit of drinking, for the pleasure in whose search the man resorted to wine has ceased to be perceived or enjoyed by him for in that last stage there is no awareness of things either inside or outside. Such unwholesome addiction is a sin and leads to physical and mental deterioration and disease. (Caraka Cikitsā XXIV, 41-51).

The Brahmachārī who lived a life of celibacy and discipline in his preceptor's home was not allowed the use of wine as also the recluse who renounced the world and strove for liberation. Men who out of an innate purity and strength of mind lived a life of discipline

and eschewed wine and meat and resorted to wholesome diet and cleanly habits, were regarded as immune from disease, whether endogenous or exogenous specially from insanity. (Caraka Cikitsā IX-96).

निवृत्तमिषमद्यो यो हिताक्षी प्रयतः शुचिः ।
निजागन्तुमिह-मादैः सत्त्ववान् न स युज्यते ॥

The therapeutic uses of wine were many and varied. Wine was also used as an anæsthetic. It was used too in parturition and after-delivery.

अयपगतगर्भशल्यां तु क्रियमाश्रयमां सुराक्षीध्वरिष्टमधुमदिरासवानामन्यतममग्रे सामर्थ्यतः
पाययेद्गर्भकोष्ठशुद्ध्यर्थमर्तिविस्मरणार्थं प्रहर्षणार्थं च । च. शा. ८, ३१

Another but very reprehensible use of wine was a vehicle for poison to be administered to one's foes. In this as already stated elsewhere, women known as "Viṣa-kanyās" (विषकन्याः) that is those that acquired immunity to poison by long usage, were used as companions in whose company the victim might be beguiled to partake of the wine with a sense of security.

Thus we may safely conclude that though the ideal of abstention from drink was upheld with great devotion the use of wine along with its occasional abuse was a popular custom in the times described in the Caraka Saṃhitā. There was luscious love of life and the pleasures it held, and each individual strove to the utmost to live a long and rich life heedful of the evils that excess in anything brought upon his health and spiritual well-being. Consequently moderation and not total abstention was the motto of life.

CHAPTER V

THE PRACTICE OF SMOKING

Smoking seems to have been a common daily procedure in India in olden times as is given in details in Caraka Saṃhitā. In the code of right conduct it is mentioned as an essential item. It was a smoking, curative and stimulant, luxurious and lightening, agreeable and enjoyable. No tobacco was used but a recipe of articles mainly of fragrant group was used. According to the constitutional organisation

and eschewed wine and meat and resorted to wholesome diet and cleanly habits, were regarded as immune from disease, whether endogenous or exogenous specially from insanity. (Caraka Cikitsā IX-96).

निवृत्तमिषमद्यो यो हिताक्षी प्रयतः शुचिः ।
निजागन्तुमिह-मादैः सत्त्ववान् न स युज्यते ॥

The therapeutic uses of wine were many and varied. Wine was also used as an anæsthetic. It was used too in parturition and after-delivery.

व्यपगतगर्भशल्यां तु क्रियमाश्रयमां सुराक्षीध्वरिष्टमधुमदिरासवानामन्यतममग्रे सामर्थ्यतः
पाययेद्दर्भकोष्ठशुद्ध्यर्थमर्तिविस्मरणार्थं प्रहर्षणार्थं च । च. शा. ८, ३१

Another but very reprehensible use of wine was a vehicle for poison to be administered to one's foes. In this as already stated elsewhere, women known as "Viṣa-kanyās" (विषकन्याः) that is those that acquired immunity to poison by long usage, were used as companions in whose company the victim might be beguiled to partake of the wine with a sense of security.

Thus we may safely conclude that though the ideal of abstention from drink was upheld with great devotion the use of wine along with its occasional abuse was a popular custom in the times described in the Caraka Saṃhitā. There was luscious love of life and the pleasures it held, and each individual strove to the utmost to live a long and rich life heedful of the evils that excess in anything brought upon his health and spiritual well-being. Consequently moderation and not total abstention was the motto of life.

CHAPTER V

THE PRACTICE OF SMOKING

Smoking seems to have been a common daily procedure in India in olden times as is given in details in Caraka Saṃhitā. In the code of right conduct it is mentioned as an essential item. It was a smoking, curative and stimulant, luxurious and lightening, agreeable and enjoyable. No tobacco was used but a recipe of articles mainly of fragrant group was used. According to the constitutional organisation

स्नात्वा भुक्त्वा समुल्लिख्य भुत्वा दन्तानिषृष्य च ।
नावनाञ्जननिद्रान्ते चात्मवान् धूमपो भवेत् ॥

च. सू. ५, ३३-३४.

“ Eight specified times are laid down for habitual smoking, because during these periods, the rise of Vāta and Kapha is observed. That is, after taking the bath, after taking the meal, after tongue scraping, after sneezing, tooth cleansing nasal toilet and the use of eye salve and at the end of sleep, the self-controlled man should resort to smoking. ’

The number of smoking differs according to the purpose for which it is used; even how many puffs are to be taken is also given.

परं द्विकालपायी स्यादहः कालेषु बुद्धिमान् ।
प्रयोगे, ष्नेहिके स्वेकं, वैरेच्यं त्रिचतुः पिवेत् ॥

च. सू. ५, ३६

“ A wise man should practise habitual smoking twice a day. The unctuous smoke should be smoked once a day and the errhine smoke thrice or four times a day. ”

तस्य तु पेयाः स्युरापानास्त्रिचतुस्तयः ।

च. सू. ५, ३५३

“ Smoking should be done thrice, in three puffs each time”.

Moreover that the smoke was enjoyed luxuriously is indicated by the description given and by the signs and symptoms described for successful smoking.

Besides this, the actions and benefits of smoking as well as the indications and contra-indications of smoking are given in details. The complications arising from untimely or excessive smoking together with their treatment are also mentioned copiously.

The ancient writers have paid full attention to the method of smoking through the mouth or the nose, and separating each, reasons are given for the resort to a particular mode. Thus the whole subject of smoking has been treated with scientific detail and insight.

CHAPTER VI

COMPANY

Man is a social creature. Caste, guilds, unions etc., are the attempts of man to satisfy the social instinct. What these groups are to society, friends are to the individual. It is truly said that a man is known by the company he keeps. A man therefore should be very careful in the selection of his friends as these friends are not only an indication to the man's inner qualities but they very often mould a man's character.

But it is not always expedient to have a fixed set of friends for all occasions. Man's activities are diverse and the company for fundamentally diverse activities should be different in order to create harmony and receive stimulus

Caraka Samhitā contains many instructions regarding the selection of one's company. He does not preach the orthodoxy of having a company of particular persons for all occasions. One has to select the company of those who are of homologous nature and at the same time fitted for the purpose. In a learned assembly, one can have scholars, but at a wine party, they would certainly be out of place. At such parties, the company should consist of those who can compete in drinking bouts and enhance the pleasure of drinking. For the purpose of increasing virility persons who augment the sensual atmosphere would be the fittest. For a company not meant for any particular occasion, one should select persons who help in the development of his life. The citations from Caraka given below will give an idea of the life of those days and the company one chose for the different activities and pleasures.

Company in General

पापवृत्तवचःसत्त्वाः सूचकाः कलहप्रियाः ।
 मर्मोद्घातिनो दुष्वाः परवृद्धिद्विषः कदाः ॥
 परापवाहरतवक्ष्यला विपुमेविनः ।
 निद्वेषास्त्यक्त्वर्माणिः परिवर्ज्या नराधमाः ॥

बुद्धिविद्यः वयःशीलैर्यस्मृतिसमाधिभिः ।
 वृद्धोपसेविनो वृद्धाः स्वभावज्ञा गन्तव्यथाः ॥
 सुमुखाः सर्वभूतानां प्रशान्ताः शंसितव्रताः ।
 सेव्याः सन्मार्गवक्ताः पुण्यश्रवणदर्शनाः ॥

च. सू. ७. ५६-५९

“Those who are sinful of conduct, speech and disposition, back-biters, quarrelsome, sarcastic and niggards; those who are envious of others' prosperity, and cheats; those who delight in scandal-mongering and are fickle-minded, those who have a foot in the enemy's camp, those who are without compunction, and apostates—all such, the scum of humanity, should be shunned. While those who are mature in understanding, learning, years, character, courage, memory and one-mindedness; those who frequent the company of such those who are endowed with insight into the nature of things, those who are free from all ailments, those who are well-disposed towards all creatures, those who are tranquil of heart, those who are commendable of character, the teachers of the right path and those who hear and see only that which is meritorious, are to be sought.”

Virilific Company

कृतैककृत्याः सिद्धार्था ये चान्योऽन्यानुवर्तिनः ।
 कलासु कुशलास्तुल्याः सत्त्वेन वयसा च ये ॥
 कुलमाहात्म्यदाक्षिण्यशीलशौचसमन्विताः ।
 ये कामनित्या ये हृष्टा ये विशोका गन्तव्यथाः ॥
 ये तुल्यशीला ये भक्ता ये प्रिया ये प्रियंवदाः ।
 तर्नरः सह विवर्धन् सुवयस्यैर्वृषायते ॥

च. वि. २/३, २१-२३

“The man that has, as his intimate companions, men given to the same activities as himself, men who have attained their objects, who are mutually helpful, skilled in the fine arts, who are similar in mind and age, who are endowed with noble lineage, magnanimity, skill, character and purity, who are ever desirous of enjoyment and are cheerful, free from sorrow and depression of spirits, who are akin to him in disposition and who are loving and beloved and pleasant in speech, such a man gets increased in his virility.”

बुद्धिविद्यः वयः शीलैर्धैर्यस्मृतिसमाधिभिः ।
 वृद्धोपसेविनो वृद्धाः स्वभावज्ञा गन्तव्यथाः ॥
 सुमुखाः सर्वभूतानां प्रशान्ताः शंसितव्रताः ।
 श्रेण्याः सन्मार्गवक्ताः पुण्यश्रवणदर्शनाः ॥

च. सू. ७. ५६-५९

“Those who are sinful of conduct, speech and disposition, back-biters, quarrelsome, sarcastic and niggards; those who are envious of others' prosperity, and cheats; those who delight in scandal-mongering and are fickle-minded, those who have a foot in the enemy's camp, those who are without compunction, and apostates—all such, the scum of humanity, should be shunned. While those who are mature in understanding, learning, years, character, courage, memory and one-mindedness; those who frequent the company of such those who are endowed with insight into the nature of things, those who are free from all ailments, those who are well-disposed towards all creatures, those who are tranquil of heart, those who are commendable of character, the teachers of the right path and those who hear and see only that which is meritorious, are to be sought.”

Virilific Company

कृतैककृत्याः सिद्धार्था ये चान्योऽन्यानुवर्तिनः ।
 कलासु कुशलास्तुल्याः सत्त्वेन वयसा च ये ॥
 कुलमाहात्म्यदाक्षिण्यशीलशौचसमन्विताः ।
 ये कामनित्या ये हृष्टा ये विशोका गन्तव्यथाः ॥
 ये तुल्यशीला ये भक्ता ये प्रिया ये प्रियंवदाः ।
 तर्तारः सह विवर्धन् सुवयस्यैर्वृषायते ॥

च. चि. २/३, २१-२३

“The man that has, as his intimate companions, men given to the same activities as himself, men who have attained their objects, who are mutually helpful, skilled in the fine arts, who are similar in mind and age, who are endowed with noble lineage, magnanimity, skill, character and purity, who are ever desirous of enjoyment and are cheerful, free from sorrow and depression of spirits, who are akin to him in disposition and who are loving and beloved and pleasant in speech, such a man gets increased in his virility.”

sense-indulgence may range from planned birth-control to anti-social and licentious behaviour. The ancient Aryan law-givers held very idealistic views regarding the sexual act, which was considered to be the means to an end viz., procreation. A distinction, however, was made between sexual maturity and the period fit for the act of reproduction. In the male, the 16th year is recognised as the starting period of the sexual impulse but the reproductive age is laid down to be 25. Similarly in the female, the sexual urge starts expressing itself with the appearance of menstruation i. e. the 12th year, but the age for reproduction is laid down to begin from the 16th year.

नरै वै षोडशाद् वर्षात् सप्तत्याः परतो न च ।

आयुष्कामो नरः स्त्रीभिः संबोगं कर्तुमर्हति ॥

च. वि. २ (४), ४०

“It is not proper for a man desirous of long life to copulate with a woman when he is under sixteen or over seventy years of age”.

तद्वर्षाद् द्वादशात्काळे वर्तमानमष्टक् पुनः ।

जगपकृतागैरणां याति पञ्चाशतः क्षयश्च ॥

सु. शा. ३, ११

“The menstrual discharge which begins from the twelfth year onwards continues till the fiftieth year when the body gets affected by senescence”.

नरश्च षोडशवर्षायां पञ्चविंशतिवर्षः पुनर्युः पुनर्युः प्रयतेन ।

अ. सं. शा. १, ३

“The man twenty-five years of age should (wed and) approach the young woman of sixteen years of age with a view to make progeny.”

Thus we find that the ages of males and females are fixed as under.

	Male	Female
Marriage age	21	12
Sexual urge	16-20	12-50
Beginning of Reproductive age	25	16

The idea behind this age limit was that the fertilizing elements both in the male and the female might be fully mature in order

to generate the best progeny.

The most dominant ambition we find in ancient Āryan people was to produce better and still better offspring, especially the male offspring. The concept of the immortality of the soul and its continuity through re-birth might have led the ancients to believe in the continued existence of one's own self in one's male child, hence the procreation of a male child was given the greatest sanctity and was considered the moral obligation of every human being. Childless condition was considered to be very deplorable and sinful and was looked down upon as a pity.

The ideological emphasis on procreation as a religious duty led to the development of the science of Eugenics. The meticulous care of the mother and other factors taken before, during and after the procreation process is significant of the superb understanding of eugenics that the ancients possessed.

This concept is a marvellous example of the combination of Eugenics (Eu-good, Gen-breeding), Eutechnics (eu-good, technic-work, the improvement of occupation) and Eutopias (eu-good, topos-place, the amelioration of environment).

The Āryans studied the science of eugenics in such detail and with so much accuracy that they were able to evolve a specific procedure of procreation where they were quite definite of the success of the procreative act.

The science had progressed one step further than the mere certainty of success of the procedures. It prescribed special procedures for generating progeny bearing a particular sex. This procedure should begin from the day the woman begins her pre-gestatory menstrual season. In chapter 8th of Śārīrasthāna detailed description and injunctions are given as to how a woman should, during her menstrual period abstain from sexual congress, sleep on the floor and avoid toilet. On the fourth day she should be massaged, bathed, shampooed and attired in white raiment. She should not have over-eaten or been famished, she should be free from anger and over-passion. Any woman tainted with abnormality should be eschewed. Then

follows a detailed description of the posture, the Mantra to be recited, diet, raiment, ornaments etc pertaining to her at mating with her husband.

Special rites are prescribed for those who want a male issue. "Of the man and woman whose bodies have been treated in the manner described above and who have paired together, the unvitiated sperm coming into contact with the unvitiated plasma in the unimpaired uterus through the unobstructed vaginal passage, gives rise, of a certainty, to conception". (Caraka Śārīra VIII-17). "The factors that determine the different psychological endowments of children are the various mental traits of the parents, the impression received by the pregnant woman, the influence of one's own past actions and special mental habits in the previous life " (Caraka Śārīra VIII-16).

The coming into existence of the embryo is attributed to various factors. "This embryo comes into existence from the coming together of these various procreative factors like a tent from the assemblage of various materials, or like a chariot from the combination of various parts of the chariot. Therefore did we assert this that the embryo is mother-born, father-born, spirit-born, concordance-born and nourishment-born. There is over and above, the connecting agent the mind." (Caraka Śārīra III-14)

In the fourth chapter of Śārīra-sthāna, the gradual development of the embryo from month to month, the forces that promote these influences which are conducive to the rise and growth of conception and those inhibitive of conception and its subsequent development are described in detail. Factors determining the sex are carefully noted providing a clue to the choice of sex by the control of these factors.

The partner of the sexual act resulting in the ultimate noble goal of procreating of progeny, healthy physically, mentally and spiritually, was not to be procured at random. Caraka's ideals of the selection of a wife exceed those of even the most aesthetic and amorous concepts of a poet specialising in amorous faculty (कविराज). These ideals depict a biological and instinctive affinity of human

attraction. The author conceives of natural love at first sight. He does not mention caste or creed, but only taboos the marriage in the same clan (तुल्यगोत्र) or with a diseased woman. Vāgbhata gives rather a detailed description of the factors regarding the selection of a wife. He not only narrates in details the positive factors in the girl as a wife, but also mentions the negative factors in order to red-signal the wrong choice. These are very interesting and instructive and appear to be quite scientific even in modern times. These show how careful and accurate were the ancients in their power of observation.

अथ खलु पुमानेव विंशतिवर्षः कन्या न तुल्यगोत्रां तुल्याभिजनामस्यारिरोगकुलप्रभृतां रूप-शील-लक्षण-संपन्नान्मनूनामविनष्टदन्तीष्ठाकर्णनासां नखकेशसर्त्री मृदुमरोगप्रकृतिमरुपिलामपिङ्गलामहीनाधिनाङ्गीं द्वादश-वर्षदेशीयाममरभुव्रजघरिदचलवृक्षपक्षिनक्षत्रान्त्यप्रेष्यमीषणकनामान्यनुद्वहन्तीमनघामनिन्धामनिन्धेन विवनोदहेत् ।

अ. सं. शा. १, २

“Now the man of the age of 21 years should, according to best rites, marry a virgin who is of alien clan, of equal high birth, born in a family without hereditary diseases, possessed of good form, morality and physiognomic marks, who is not deficient, who has not lost a tooth, lip, ear, nose, nail, hair or breast, who is delicate, not of a diseased constitution, who is neither reddish nor tawny, who has neither superfluous limb nor is deficient of limb, who is about 12 years of age, who does not bear the name either of a god, serpent, river, mountain, tree, bird, constellation, low caste or a servant or a name which is not terrifying, who is devoid of sin and who is not the object of censure’.

Caraka gives the positive qualities necessary in a bride thus:

सुखं जीवनस्या या लक्ष्णैर्या विभूषिता ।
या वक्ष्या शिक्षिता या च सा स्त्री वृष्यतमा मता ॥
नालभक्त्या तु लोकस्य दैवयोगाच्च योषिताम् ।
तं तं प्राप्स्य विवर्धन्ते नरं रूपादयो गुणाः ॥
वयोरुच्यचोदायैर्या यस्य परमाङ्गना ।
प्रविशत्यश्नु हृदये देवादा कर्मणोऽपि वा ॥
हृदयोत्सवभूता या या समानमनःसना ।
समानसत्वा या वक्ष्या या यस्य प्रीयते प्रियैः ॥

या पाशभृता सर्वेषामिन्द्रियाणां परैर्गुणैः ।
 यया विद्युको निह्नीकमरतिमन्वते जगत् ॥
 यस्या ऋते शरीरं ना धत्ते शून्यमिवेन्द्रियैः ।
 शोकाद्वेगारतमयैर्या दृष्ट्वा नाभभूयते ॥
 याति यां प्राप्य विलम्बे दृष्ट्वा हृष्यत्यतीव याम् ।
 अपूर्वामिव यां याति नित्यं हर्षातिवेगतः ॥
 गत्वा गत्वाऽपि बहुशो यां तृप्तिं नैव गच्छति ।
 सा स्त्री वृष्यतमा तस्य नानाभावा हि मानवाः ॥

च. वि. २ (१), ७-१५

“The woman who is good looking, young, endowed with auspicious physiognomic marks, amiable and is skilled in fine arts, acts as the best virilific.

The qualities of beauty etc., in the woman develop suitably to the nature of the husband. They are found either as a result of their destiny or as a result of the varied tastes of people. She, who is the best of woman for a man, and endears herself to him quickly by virtue of her age, form, speech and gestures either as a result of destiny or the merits of action in this very life, who is the delight of his heart, who returns his love in equal measure, who is akin to him in mind, who is amenable to and is pleased with his advances, who enthralles all his senses by her excellent qualities, separated from whom he feels the world to be desolate, joyless, but for whom he feels his body a burden and as if devoid of its senses, at the sight of whom he is untouched by grief, distress, depression or fear, approaching whom he gains confidence, seeing whom he gets greatly elated, whom he approaches daily with great eagerness as if for the first time, and uniting with whom in sex repeatedly he remains yet unsatisfied, such a woman is the best of virilifics to him; and men indeed are of varied temperaments”.

These rules prescribed by medical authorities were accepted by the society in general as will be seen by the code of selection of a wife given in Manu-smṛti.

द्वीयकियं निष्पुङ्गवं निश्छन्दोरोमशाङ्गसम् ।
 क्षय्यमवयवपक्ष्मादिभिर्विकृष्टिकुलानि च ॥

नोद्वहेत् कपिलां कन्दां नाधिकार्द्धं न रोमिणीम् ।
 नालोमिकां नातिलोमां न बाचाटां न विह्वलाम् ॥
 नर्क्षवृक्षनदीनाम्नीं नान्त्यपर्वतनामिकाम् ।
 न पक्ष्यद्विप्रेष्यनाम्नीं न च औषणनामिकाम् ॥
 नातिस्थूलां नातकुशां न वीर्यां नातिवामनाम् ।
 वयोधिकां नांगहीनां न सेवेत्कलहप्रियाम् ॥
 अव्यङ्गाङ्गीं शौम्यनाम्नीं इन्मवारणगमिनीम् ।
 तनुलोमकेशदशनां मृद्वङ्गीमुद्वहेत् स्त्रियम् ॥

म. स्मृ. ३, ७-१०

“ One which neglects the sacred rites, one in which no male children (are born), one in which the Veda is not studied, one (the members of) which have thick hair on the body, those which are subject to hemorrhoids pthisis, weakness of digestion, epilepsy, or white and black leprosy.

Let him not marry a maiden (with) reddish (hair), nor one who has a redundant member, nor one who is sickly, nor one either with no hair (on the body) or too much, nor one who is garrulous or has red (eyes), nor one named after a constellation a tree, or a river, nor one bearing the name of a low caste, or of a mountain, nor one named after a bird, a snake, or a slave, nor one whose name inspires terror.

One should not resort to a woman who is very corpulent, very lean, very long (tall), very short (dwarfish), old in age, bereft of any limb and who is quarrelsome.

Let him wed a female free from bodily defects, who has an agreeable name, the (graceful) gait of a Hamsa (swan) or of an elephant, a moderate (quantity of) hair on the body and on the head, small teeth and soft limbs’.

CHAPTER VIII

TREATMENT AND THE STATUS OF THE PATIENT

In ancient India the patronage to poets, Vaidyas and artists

came from the aristocracy and hence the treatment prescribed in old medical works was mainly designed for the princes and aristocracy. It is but natural that the patronized class catered to the patrons' tastes and status. The middle and the poor classes, however, were not neglected. The treatment prescribed for the aristocracy was modified according to the status of the patient. Moreover, it is in the fitness of things that the best possible treatment be described and modifications introduced according to the pecuniary condition of the patient. Thus although the whole chapter of Caraka Sūtra XV is meant for the upper strata of society, we find that at the end of the chapter it is clearly stated that treatment should be modified according to circumstances.

अनेन विधिना राजा राजमात्रोऽथवा पुनः ।
 यस्य वा विपुलं द्रव्यं स संशोधनमर्हति ॥
 दग्निद्रव्यपदं प्राप्य प्राप्तकालं विशोधनम् ।
 पिबेत्काममसंशृत्य संभारं नपि दुर्लभात् ॥
 न हि सर्वमनुष्याणां सन्ति सर्वे परिच्छदाः ।
 न च गेया न वाच्यं ते दग्निद्रव्यं दाहनाः ॥
 यद्यच्छब्दं मनुष्येण कर्तुमौषधमापदि ।
 तत्तत्सेव्यं यथाशक्ति दसनाभ्यसनानि च ॥
 ईश्वराणां वसुमतां वसनं सविरेचनम् ।
 संभारा ये यदर्थं च समानीय प्रयोजयेत् ॥

च. सू. १५, १८-२१&२३.

The aristocratic methods of treatment in various conditions especially in burning sensation in the body (दाह) out-do any of the luxurious way of treatment known to the modern world. Vivid descriptions of lavish dinner and drink parties are found in the Caraka-saṃhitā. The dominance and patronage of the aristocracy resulted in innumerable pharmaceutical preparations, the great advancement of the culinary science, hundreds of varieties of wine, fragrant preparations, and milk and sugar preparations suited to the service of this class.

The love of art and display of riches permeated even medical practice and even the medical apparatuses used were ornamental.

(वस्त्रि)नेत्राणि सुवर्णरूप्य...मणिभिः कर्णणि	च. नि. ३, ५
पुष्पनेत्रं तु हंसं स्यात्	च. नि. ९, ५०
सुचिपिण्डकौ सौवर्णराजतौ	च. नि. ८, ३६
तीक्ष्णेन शैक्वराजतायस्वर्णां छेदनादान्धत्वेन र्ध्वान्नि छेदयेत्	च. नि. ८, ४४

Delicateness of constitution was considered to be a result or a characteristic of the aristocratic way of living and hence special preparations of medications were prescribed for this class, so that their delicate constitution may not suffer from strong and drastic drugs and procedures.

मानवः लेह्यदेतदीश्वराणां विरेचनम् ॥२५॥
एतदुत्सृज्यपित्तानामीश्वराणां विरेचनम् ॥ २७॥
लेह्येऽयं कफपूर्णानामीश्वराणां विरेचनम् ॥३२॥

च. क. ७

The predominance of the rich was quite in consonance with the prevalent outlook of the people at the time. Wealth was considered one of the three great ambitions (एवम) of life. It stands next only to life (प्राण) in order of importance. (Caraka Sūtra XI-3)

प्राणेश्यो ह्यनन्तरं धनमेव पर्येष्टव्यं भवति ।

च. सू. ११, ५

The man devoid of money was considered miserable.

न ह्यतः पापात् पापीयोऽस्ति यदनुपकरणस्य दीर्घमायुः । तस्मादुपकरणानि पर्येष्टुं श्येत ।

च. सू. ११, ५

The dual strictness of the rules of the state and the society often made the practising Vaidya hesitate or even refuse to treat a poor patient, not because he lacked in the humane quality of compassion, but because the Vaicya was doubtful of his success in treating such a patient as the poor patient could not afford to have all the required articles of medication and also attendants (शरङ्ग). Failure to cure a patient would bring blame or discredit upon the Vaidya, and it is in order to save himself from such a fact that the poor man is included in the category of persons who are not to be taken up for treatment.

इवावसेचनमन्धरा मेघं प्राप्यकालमप्यातुरस्य वैमिषस्य कुर्यात् । तद्यथा-अनपवादप्रतीकारस्या-
वस्थापरिवारकस्य वैमनाशिवशक्यस्यसुखस्य त्रीनाचर्यैकैकिकीयवक्तृमाकरोजितस्याप्यारोगोपहतस्य मुमुक्षुः क-

ज्ञानितस्य चेति । एवंविधं ह्यातुरक्षुरचरन् निषक् पारीयसायशसा योगसृच्छतीति ॥४५॥

च. वि. ३, ४५

टीका-अथनस्य अनुपकरणत्वेन न चिकित्सा कार्यते इति.

But this is only one side of the picture. In *Suśruta Sūtra* 2-3, we find that it is enjoined upon the physician to treat such poor people at his own cost.

द्विजयुद्धरिद्रमित्रप्रव्रजितोपनतसाध्वनाथाभ्युपगतानां चात्मबान्धवानामिव स्वमेवजैः प्रतिकर्तव्यम् ।
एवं साधु भवति ।

"One should treat at his own cost as his kith and kin the following persons: the twice born, the preceptor, the pauper, the friend, the recluse, those who have sought his shelter, the virtuous, the orphan and the refugee. Thus does he earn credit."

Thus in spite of the dominance of the aristocracy, the poor patients were not neglected and a sacrifice of great magnitude was expected of a physician. The Vaidya used to get enormous fees as is evident from Jivaka stories, and so he could afford to treat the poor at his own cost, as a compensatory measure for the royal fees he used to get from his rich patrons.

CHAPTER IX

THE USE OF ORNAMENTS

Putting on of ornaments and jewels was a fashion, aesthetic practice, satisfaction of vanity and a medical utility—all at once in Caraka's period.

धन्यं महल्यमायुष्यं श्रीमद्वयसनसूदनम् ।

हर्षणं काम्यमोजस्यं रत्नाभरणधारणम् ॥

च. सू. ५, १७

"The wearing of jewels and ornaments brings prosperity and is auspicious, promotive of longevity, decorative, dispersive of worries, exhilarative, attractive and vitalizing".

Besides the metal ornaments and jewels, people used to put on some special herbs (ओषधि) which were considered as protective of life and prophylactic and curative of particular disease.

ओषधीः प्रशस्तः धारयेत् ।

च. सू. ८, १८

Thus we find that the putting on of jewels (मणिधारण) as well as herbs (ओषधि) were prescribed for children (कुमार) who had not yet attained adolescence.

मणयश्च धारणीयाः कुमारस्य खड्गदग्धवयवभूषणां जीवतामेव दक्षिणेभ्यो विषाणेभ्योऽग्राणि पृथ्वीतानि स्युः । ऐन्द्रयाद्याश्चोषधो जीववर्धनौ च, यानि चान्यान्यपि ब्राह्मणाः प्रशस्तेष्वर्यवेदविदः ॥

च. शा. ८, ६२

These two were the precepts of the Atharvana (अथर्वण) also.

The love for ornaments was however never allowed to overstep the boundaries of propriety. When a patient was admitted to the therapy room for treatment, he was bereft of all ornamentation. It was only when he was to be discharged and exhibited before his friends and kinsman as cured that he was dressed well and made to put on ornaments. (अलङ्कारालङ्कृतः सू. १५, १७).

Similarly no ornaments were to be put on during Kuṭipraveśa (कुटिप्रवेश). Students too did not put on ornaments as that would not suit the austere ideals of student life and natural surroundings. It was only when the natural charm was required to be supplemented by ornaments and decorations or when the auspicious occasion demanded such gaiety or when some medical purpose was supposed to be served that light or heavy ornaments were required to be put on.

It was enjoined upon a woman going to unite with her husband for procreation to put on garlands and ornaments to add to her natural womanly beauty.

अवदाताय सज्जो भूषणानि च विभूषात्

च. शा. ८, ९

Similarly the mother taking the child for naming ceremony (नामकरण) was to put on light and variegated ornaments.

पित्रेष्टलघुचित्रभूषणवती

च. शा. ८, ५०

A wet-nurse was required to put on herbs (ओषधि) when suckling was to begin.

धात्री तु यदा स्वादुबहुलशुद्धदुग्धा स्यात्तदा स्नातानुलिप्ता शुक्रवस्त्रं परिधायैन्द्रो ब्राह्मी शतवीर्या सहस्रवीर्यामोघामन्यथा शिवामभ्यां वायुपुष्पी विश्वक्सेनकान्तां वा विभ्रतयोषधि कुमारं प्राङ्मुखं प्रथमं दक्षिणं स्ननं पाययेत् । इति धात्रीकर्म ।

च. शा. ८, ५८

The decorative use of ornaments was not restricted to women only. At the time of sexual congress, ornaments were to be put on by both the parties. Even in daily routine of wholesome living both man and woman were exhorted to wear garlands and ornaments as they brought auspicious results.

अभ्यङ्गोत्पादनस्नानगन्धमाल्यविभूषणैः ।

शुद्धशय्यामनपुष्पैर्वासोभिरहृतैः प्रियैः ॥

विद्वज्जनां हारिष्टैः स्त्रीणां चाभरणस्वनैः ।

संवाहैर्बर्ह्योणामिष्टानां च वृषायते ॥

च. वि. २/३, २४-२५

Gems were believed to have very cooling effects and as such they were used as therapeutic measures, e. g. women wearing gems and ornaments were prescribed in burning sensation (दाह) in fevers.

प्रियाः प्रदक्षिणाचाराः प्रमदाश्चन्दनोक्षिताः ।

सान्त्वयेयुः परैः कामैर्मणिमौक्तिकभूषणाः ॥ २६५ ॥

च. वि. ३

Even applications of gems were made.

वैदूर्यमुक्तमणिमाजनानां स्पर्शाश्च दाहे शिशिराम्बुशीताः ॥ १०६ ॥

च. वि. ४

The therapeutic use of jewels did not end with such cooling properties they were believed to possess. A person with consumption should always keep himself dressed and decorated with ornaments as an alleviating measure.

गन्धैः समालयैर्वासोभिर्भूषणैश्च विभूषितः ॥ १०९ ॥

च. वि. ८

The following gems and herbs were put on as a prophylactic measure against snake-poison.

वज्र मरकतः सारः पिचुको विषमूषिका ।
कर्केतनः सर्पमणिर्वैद्यं गजमौक्तिकम् ॥ २५२ ॥
धार्यं गरमणिर्वाश्च वरौपक्ष्यो विषापहः ।

च. वि. २३

Besides these medico-cum-decorative uses of gems and ornaments we find references to the merely aesthetic use of these e. g. in the description of wine parties. At such a party a person was required to be well-decorated in conformity with the gay spirit of Bacchus prevailing on the occasion.

विचित्रविचित्रस्त्री रत्नाभरणभूषितः ॥ २२ ॥

च. वि. २४

Not only the participants in the revelry were required to be decorated, but the attendant women were also to present themselves gaily decorated in consonance with the spirit of gaiety.

रूपशौवनमत्ताभिः सिद्धितभिर्विशेषतः ।
वस्त्राभरणमाल्यैश्च भूषितामिर्वैद्यतुः ॥ १६ ॥
शौचानुगद्युक्ताभिः प्रमदमिरित्ततः ।
संवाह्यमान इष्टाभिः पिवे मद्यमनुत्तमम् ॥ १७ ॥

च. वि. २४

Vessels used on such occasions were ornamental so that there may be no discordant note to mar the joy pervading the atmosphere.

सौवर्ण्यै राजन्श्च पि तथा मणिमयैरपि ।
साजनेर्विमलैश्चान्यैः सुकृष्टैश्च पिवेत् सदा ॥ १५ ॥

च. वि. २४

But these gems, even in such drinking parties, contributed their mite towards mitigating the effects of drink. Gems were believed to be cooling and refrigerant agents and as such they served the medical purpose also.

शौमपद्मोत्पलानां च मणीनां मौक्तिकस्य च ।
चन्दनोदकशौतानां स्पर्शाश्चन्द्राद्युशीतलः ॥ १५३ ॥

च. वि. २४

The vessels used for filling refrigerant medicines were made of rich metals and were used as cold applicators.

हेमराजतकास्यानां पत्राणां शीतवारिभिः ।

पूर्णानां हिमपूर्णानां हतीनां पवनादताः ॥ १५४ ॥

च. वि. २४

From the various descriptions in Caraka Samhita we find that the following metals, gems, precious stones and other materials were in use during the period.

अर्क (मणि विशेष) - वि. ७-८५. कनक - सू. ५-१८. काच - वि. १७-१२५. काश्मिर - वि. १(४), ५९. गजमौक्तिक - वि. २३-२५२. गरमणि - वि. २३-२५२. ताप्य - वि. १६-७८. तीक्ष्णायस - वि. १(३). १६. मरकत - वि. २३-२५२. रीति - सि. ३७. वराटक - वि. २६-२२४. विषमूषिका - वि. २३-३६२. वैदूर्य - वि. २३-२६२. सर्वमणि - वि. २३-२६२.

Besides these we come across references to प्रवाल, विद्रुम, शङ्ख, शुक्ति, सीसक, सूर्यकान्त, अयस्, माक्षिक etc.

CHAPTER X

WOMAN IN CARAKA'S TIMES

The primary as well as the secondary sexual differences of the woman from those of man have given her a distinctive social position throughout the many ages of human history. In the ancient world she held either a privileged position by virtue of her charm, delicacy and relative weakness or an inferior position to man's and was regarded as a subordinate, ornament and source of sense satisfaction, to be possessed, decorated or pampered. It is only in recent times that her claim to equality with man has been seriously put forth and has gained recognition in all civilised countries. It is only now that she claims neither the privileged position with its implication of relative weakness and inferiority nor the subordinate position as an object of sense gratification. She is now asserting her equal partnership with the man in the enterprise of life and wants neither more nor less. In view of this, it would be interesting to see what position and task she was assigned in the various context of social life as portrayed in the

texts of Āyurveda and particularly in the Caraka Samhitā, the work under review.

We shall divide the reference into two classes: (A) those regarding her growth, aging and constitution, the disease, general and special, she is liable to, modification of medications and dosage, and the last but the most important the physiology and pathology of the maternity period she passes through, and (B) the general references direct and indirect as a woman.

A. Medical references—

1. The sages of India by long observation and thought knew the difference in the pace of growth and decay of the constitutions of both man and woman. In physical and mental development and maturity as well as in their decay man is slower than woman. This fact is depicted in observations like the following:—

पञ्चविंशे तते वर्षे पुमान् नारी तु पौडशे ।
समत्वागतवीर्यौ तौ जनीयात् कुशले भिषक् ॥

सु. सु. ३५, ३१.

“The wise physician should know that a man of twenty-five years of age and a woman of sixteen years of age have attained to an equal stage of sexual maturity”.

तद्वर्षाद् द्वादशात् काले वर्तमानमद्यह् पुनः ।
जरापक्वगरीरानां याति पञ्चाशतः क्षयम् ॥

सु. शा. ३, ११.

“The catamenial discharge which starts from the age of twelve in a woman comes to a cessation at the age of fifty when the body enters in its stage of senescence”.

2. She is liable to all diseases which human flesh is heir to and in addition to these diseases she suffers from diseases and disorders peculiar to her due to the special structure of her sexual organs. These diseases are called gynecic diseases (योनिरोग) and a special chapter has been devoted to them (च. वि. ३०.). In the chapter on Gulma, a special type of it called Rakta Gulma is described which is a peculiar affection of

the female species as it is a uterine affection. Again while describing Vāta disease, Caraka says that her position of dependency on man, her lack of enlightenment, and her natural inclinations to shyness, delicacy and modesty, impose restrictions on the prompt discharge of natural urges.

शोणितगुल्मस्तु खलु स्त्रिया एव भवति न पुरुषस्य, गर्भकोष्ठार्वागमनवैशेष्यात् । पारतन्त्र्याद-
वैशारद्यात् सततसुपचारानुरोधाद्वा वेगानुशीर्णानुपरुन्धत्या आमगर्भे वाऽप्यचिरपतितेऽथवाऽप्यचिरप्रजाताया ऋतौ
वा वातप्रकोपणान्यासेवमानायाः क्षिप्रं वातः प्रकोपमाप्नुते ॥ च. नि. ३, १३

"The Gulma born of vitiated blood occurs only in women and not in men, because of their peculiar feature of menstrual discharge from the uterus. Owing to her position of dependence, ignorance and continual occupation in service and duty, she restrains the natural urges of the body. Either just after abortion or miscarriage, or just after delivery or during the menstrual period, if a woman takes Vāta-provoking food, her Vāta gets quickly provoked."

3. Her constitution, being considered weaker than that of a male is compared with the constitutions of the child and the aged persons, and accordingly medications are to be made milder for her.

नृपाणां तस्मिन्नात्मनं तथा सुमृतामपि ।

नारीणां सुकुमाराणां शिशुस्यन्त्रियोरपि ॥

सु. वि. ३८, ९६

"For kings, and kingly persons, and great men, for women, and persons of delicate constitution as well as for children and the aged (we shall describe the dosage of oil and honey.)

4. One special branch of the octopartite Āyurveda has been devoted to the physiology and pathology of the maternity stage of a woman's life.

B. Caraka samhitā being primarily a medical treatise takes a scientific and biological view of man and woman. Yet the social practices of the age and the relative imposition of woman have been mentioned explicitly sometimes and implicitly more often.

1. In the etiology of Rakta Gulma, the social position of the woman in general is referred to. (च. नि. ३, १३ quoted (above)).

2. In the description of posology she has been described as unsteady by nature, tender, wavering, easily disturbed and generally delicate, weak and dependent on others.

एतच्च कारणमपेक्षमणा हीनबलमातुःमविषादकरैर्दुःसुखनारप्रायैस्तरोत्तगुरुभिर्विषमैरनात्ययिकैश्चो-
पचरन्त्यौषधैः विशेषतश्च नारीः ता ह्यनवस्थितमृदुविवृतविक्रवहृदयाः प्रायः सुकुमारौऽबलाः परमंस्तन्याश्च ॥
च. वि. ८, १४

"It is owing to this reason that in emergency a weak patient should be first treated with non-distressing, mild and generally delicate remedies and later on gradually, by heavy remedies which do not upset him or give rise to complications. This should be specially done in the case of woman. They are by nature unsteady, tender, wavering, easily disturbed and generally delicate, weak and dependent on others."

3. In the chapter instructing the principles of good way and behaviour of life to man, it is said:

नस्त्रियमवजानीत, नातिविश्रम्भयेत् न गुह्यमनुभ्रावयेत्, नाधिकुर्यात् ।

च. सु. ८, २२

"Do not contemn nor confide in the woman overmuch, nor divulge a secret to her, nor place her in power".

4. Women were also trained to play the part of companion and entertainer to man in his pursuit of pleasure. Caraka describes the part played by women attendants and carriers who actually were to be well-trained in the art of entertainment.

रूपयौवनमतामिः शिक्षितामिर्विशेषतः ।

वस्त्राभरणमाल्यैश्च भूषितामिर्यथर्तुभिः ॥१६॥

शोचन् नुर गयुष्कामिः प्रमदामिरितस्ततः ।

संवाह्यमान इशामिः पिबेन्मद्यमनुत्तमम् ॥१७॥

च. वि. २४

"He should drink while being shampooed by clean, loving, beautiful, young and well trained women decked in fine clothes, jewels and flowers suitable to the season."

5. In the description of the selection of a wife, life's partner, one of the qualifications she must needs possess was her being वक्ष्या i. e. amenable.

समानसत्त्वा या वक्ष्या या यस्य प्रीयते प्रियैः ।
या पाशभूता सर्वेषामिन्द्रियाणां परैर्गुणैः ॥

च. वि. २/१, १०.

".....who is akin to him in mind, who is amenable to and pleased with his advances, who enthralls all his senses by her excellent qualities."

6. A woman's body and appearance have been considered the best aphrodisiac.

वाजीकरणमयं च क्षेत्रं स्त्री या प्रहर्षिणी ॥४॥
इष्टा लोकेच्छोऽप्यर्थाः परं प्रीतिकराः स्मृताः ।
किं पुनः स्त्रीशरीरे ये सङ्घातेन प्रतिष्ठिताः ॥५॥
(सङ्घातो हीन्द्रियार्थानां स्त्रीषु नान्यत्र विद्यते)
स्त्र्याश्रयो हीन्द्रियार्थो यः स प्रीतिजनोऽधिकम् ।
स्त्रीषु प्रीतिर्विशेषेण स्त्रीष्वप्ययं प्रतिष्ठितम् ॥६॥

"The last means of stimulating one's manhood (the best agent of virilification) is an exhilarating sexual partner in the wife. When the desired sense-objects yield great pleasure even if singly experienced by the senses, then what need be said of the person of the woman in whom the delectable objects of all the senses are found established together. Such combination of the delectable objects of all the senses is found only in the person of the woman and nowhere else. Indeed it is the object that is found in the person of the woman that evokes our pleasure greatly. Hence it is that man's pleasure is mainly in the woman and that in her is established the source of progeny."

7. Mention of woman is made as a therapeutic agent in the diseases coming under the category of Pitta type, specially fever and alcoholism.

तस्यावजयवं... संयोगचेष्टाभिः स्त्रीभिः स्त्रीमहितांशुकसङ्घर्षिणीभिः,

च. वि. ६, १७

"To counteract and subdue such a condition the following measures should be taken:—

.....keeping also the company of agreeable women wearing cool garments and garland'.

8. She has been used as a poison girl or poisoner.

विषैर्निहन्त्युन्मिषुर्गं नृपतिं दुष्टचेतः ।

मित्रो वा विविधान् योगान् कदाचित्सुभगेच्छया ॥

विषकन्योपयोगाद्वा क्षणाच्छादयन्नरः ।

तस्माद्विद्येन सततं विषादक्ष्यो नराधिपः ॥

सु. क. १, ५-६

"Evil minded women destroy the life of the skilful king by means of poison and sometimes by various poisonous potions for the sake of winning good luck; man also loses his life quickly by contact with poison girls; it is therefore that the physician should constantly protect the king from the dangers of poison".

9. Man is advised to have as sexual partners different types of woman according to the season; e. g. one should have a plump and passionate woman as bed-mate in the winter.

गुरुष्णवाचा दिग्वाङ्मो गुरुणाऽगुरुणा सदा ।

शयने प्रमदा पीनां भिद्यालोपचितस्तनीम् ॥ १६ ॥

आलिङ्गयागुरुदिग्वाङ्गीं सुप्यान् समदमन्मयः ।

प्रकामं च निषेवेन मैथुनं शिशिरागमे ॥ १७ ॥

च. सू. ६, १६-१७

"When winter begins, one should always wear warm and thick clothing and should have one's body anointed with thick paste of eagle-wood. Lying in bed with a plump and passionate woman of high and plump breasts who has anointed herself with the paste of eagle-wood, one should, warmed up by aphrodisiac wines, spend the night in her embraces'.

भक्षये'ज्जर्दं सीधुं विषेन्माध्वीमेव वा ।

वसन्तेऽनुमवेत् स्त्रीणां वाननानां च यौवनम् ॥

च. सू. ६, २६

"One should drink wholesome Sīdhu or honey wine and enjoy the youthful loveliness of women and gardens."

10. There is no corresponding pre-natal *जीवन* ceremony as we have the *पुंसवनविधि* for male progeny. There is no special ceremony believed to be as inductive and constitutive of the procreation of a female child as we have it in the case of a male child.

11. The virilification section which forms one of the eight branches of the octopartite *Āyurveda* is devoted solely to helping the man and there is no mention of a woman in this process.

12. No names of renowned female scholars or *Vaidyas* are found in the texts. This is an indication that women usually kept or were kept aloof from learning the medical science.

13. The ethics of the medical practitioners as described in the texts indirectly give us an idea of the status of woman in ancient India.

“.....तथैवासिद्धितेधराणां जीणामनध्यक्षाणां वा.....”

“Women who are not attended by their husbands or guardians (shall not receive treatment).”

न च कदाचित् स्त्रीदत्तमामिषमादातव्यम् अनुज्ञातं भर्तास्थवाच्यक्षेण....

“No offering of meat by a woman without the behest of her husband or guardian shall be accepted by thee.” (*Caraka Vimāna VIII, 13*)

स्त्रीभिः सहास्यां संवासं परिहासं च वर्जयेत् ॥

वर्तं च तभ्यो नादेयमस्मादन्यद्भिरग्नैः ॥

सु. सू. १०, ९

“Physicians should not indulge in laughter or jokes with women nor stay long with them, nor should they accept gifts other than food from women”

The code of surgical nursing proscribes the services of a female nurse. Not only that even the sight of a woman is considered undesirable.

स्त्रीदशनादिभिः शुकं कदाचिच्चर्तं सवेत् ।

प्राम्यवर्मकृतान्दोषान् सोऽप्यसौऽप्यवाप्नुयात् ॥

सु. सू. १९, १५

“Sometimes, by even sight and other contacts with a woman there may occur seminal discharge. Thus even without sexual union, a man will suffer the evil effects thereof”.

But all these references which indirectly give us a glimpse of the status of women in those times need not lead us to the conclusion that she was regarded as no more than a chattel or a useful toy to please the whims of man. Although her natural weakness and her anatomical peculiarities kept her far behind in the race as against man, her status as mother was highly respected. She was the fountain source of the propagation of race. Childlessness was not only deplored, it was despised.

अच्छायाश्चैकाग्रश्च निष्कलश्च यथा द्रुमः ॥ १३ ॥

अनिष्टगन्धश्चैकश्च निरपत्यस्तथा नरः ।

विवर्दीयः सरः शुष्कमथ तुर्धतुर्गन्धिः ॥ १७ ॥

निष्प्रजस्तृणपूलीति मन्तव्यः पुरुषाकृतिः ।

अपतिश्च नमश्च शून्यश्चैकेन्द्रियश्च ना ॥ १८ ॥

मन्तव्या निष्क्रियश्चैव वस्यापत्यं न विद्यते ॥

च. वि. २/१.

“The man without progeny is like a solitary tree that yields no shade which has no branches, which bears no fruit and is devoid of any pleasant odour. The man without progeny is to be regarded as a painted lamp, a dried up lake, or a pseudo-metal which only has the appearance of the precious metal and is like a man of straw possessing only the shape of man. Again, such a man without progeny is regarded to be not well-established, bare, like a void, and possessed of only one sense and as having lived a purposeless life”

So it was the women who brought the very purpose of life to fruition.

Again a child, a male child, was absolutely necessary in order that the person be free from one of the three debts which he is enjoined upon to discharge.

एवं जाता रूपवन्तः सत्ववन्तश्चिरयुषः ।

भवन्त्युणस्य भोक्तारः सत्पुत्राः पुत्रणे हिताः ॥ ३४ ॥

“Good and filial sons who are thus born, who are handsome, truth speaking, long-lived and are righteous owe a debt to their parents (and should discharge the same)”.

Woman is the only source of progeny and as such she was

highly respected. As a matter of fact it was the protection the woman received as the source of progeny, family honour and the repository of dignity that kept the women from coming to the forefront. So her very usefulness was turned into her weakness. Caraka when he comes to speak about this aspect of woman's life waxes eloquent and surpasses others in his eulogy of the woman.

इत्याश्रयो ह्रीन्द्रियार्थो यः स प्रीतिजननोऽधिकम् ।

स्त्रीषु प्रीतिविशेषेण स्त्रीष्वपत्यं प्रतिष्ठितम् ॥

धर्मायै स्त्रीषु लक्ष्मीश्च स्त्रीषु लोकाः प्रतिष्ठिताः ॥

च. वि. २(१), ६-६३

" Indeed it is the object that is found in the person of the woman that evokes our pleasure greatly. Hence it is that man's pleasure is mainly in the woman and that in her is established the source of progeny. In her also are established righteousness, wealth, auspiciousness and the two worlds—the ^{नित्यं} and the other'.

Thus although the biological by their ~~man~~ woman as given in medical texts of old is not so glorified ^{मान} man, as she is by nature weak and inferior to man, ^{अननुज्ञातं भर्ताऽश्ववाच्यं} her aesthetic value was regarded highly and her social ^{मान} without the behesetuator of the race was almost adored. ^{वे." (Caraka Vimān}

CHAPTER XI

THE SENSE OF SMELL

The sense of smell or the olfactory organ plays a more important part in our daily lives than is ordinarily believed. In the early stages of civilization, it was the most important sense, but it gradually lost its full significance with the advancement of modern civilization. In ancient times it was a protective organ and 'luxury' organ combined and man made use of this olfactory power for various purposes.

Animals were guided by this sense in their daily lives. It warned the animal of the approach of an enemy, it guided the animal in its quest for food and motivated its sex reflexes. Man

with his superior intelligence turned this sense into a 'luxury' sense also. In ancient days nose-rub was prevalent in lieu of the lip-kiss as a sign of love. To early man, the kiss, as the Europeans know it, was unknown. The ancient languages bear testimony to this fact. The Sanskrit word for 'kissing' is 'ghrā' also, which means to smell. In old Persian the word for 'love' means 'smell.' In classical Greek there was no word for 'kiss' and in the Maori tongue of the New Zealand aborigines, the greeting expression is not found, but its place is taken by the phrase "I smell you." Even today the Maoris use the nose-rub as an expression of greeting. The Japanese abhor the lip-kiss in practice so much so that love scenes in cinema films have to be scissored before being exhibited. Thus the nose-rub may be regarded as a relic of a time when man based his feelings of sympathy for other human beings upon the olfactory sensations which they provoked in him.

Many physicians were reputed to be able to smell a disease. There is a story that when the mother of a sick child wanted to conduct a famous nineteenth century physician into the sick-room, he said 'don't wake her'. Then on opening the door slightly, he sniffed the air and announced the diagnosis of "scarlet fever."

The above is an example of the higher development of the olfactory sense of a person who can sniff and separate the subtle difference of smell. Such persons are classified as belonging to the 'olfactory type.' Such olfactory specialists are highly valued by perfume manufacturers even in modern times.

Scientists consider taste and smell as chemical sense. This chemical sense was highly developed in the early period of the evolution of man. It gradually became blunted with the progress of modern civilization. It has been found on geographical considerations that persons of the olfactory type are less numerous in the Western Atlantic civilization than among the Orientals and in the tropics. It has been humourously remarked by an eminent scholar of botany that Indians had noses but no eyes as Europeans had eyes but no nose. This is but an apt summary of the fact that Indians prefer plants and flowers more for their fragrance than for their appearance, while the reverse

is true of the Westerners. Even nature seems to be discerning in the distribution of her bounties. The Himalayan flora is full of fragrance while the Alpine flora is resplendent with variegated hues.

This love of fragrance among the Orientals is either the result of or is enhanced by the coincidence of several facts such as the abundance of fragrant articles in the East, the higher development of the olfactory sense, the superb sense of cleanliness and purity of internal as well as external parts of the body and the subtle aesthetic sense of olfactory luxury. There are plenty of references indicating the use of the olfactory sense for various purposes in health and disease.

The use of thuriferous articles formed part of religious ceremonies. The sacrificial articles and wood were offered as oblation into the sacrificial fire and this resulted in the impregnation of the whole atmosphere with pleasant aroma.

The rooms whether they be for assembly meeting or for drinking party or they be amorous chambers, were decorated with seasonal and pleasant smelling flowers. Sometimes even the ground was carpeted with such flowers.

शरीरकृतसंस्कारः शुचित्तमगन्धवान् ।
 प्राकृतो निर्मलैर्वस्त्रैश्चतुष्टयमगन्धिभिः ॥
 विचित्रविधिविधस्नानी रत्नाभरणभूषितः ।
 देवद्विजातीन्संपूज्य स्पृष्ट्वा मङ्गलमुत्तमम् ॥
 देशे यथर्तुके गस्ते कुसुमप्रकरीकृते ।
 सरसासंमते मुख्ये भूपसमोदबोधिते ॥

मन्त्रानुकूलैर्विविधैः फलैर्हरितैः शुभैः ।
 लवैर्गन्धपिशुनैरवदशैर्यथर्तुकैः ॥

च. चि. २४, ११-१३&१८

“Having attended to the internal needs of the body and having bathed and painted himself with fragrant sandal, a person must wear clean clothing along with ornaments and fragrances suitable to the season. Then decking himself with garlands of variegated flowers and with jewels and ornaments, he should worship the gods and the Brāhmaṇas and touch the most auspicious articles. Seating

himself comfortably in a sitting or lounging position on a well-made bed with pillows, in a spot scattered with flowers that are best suited to each season and fumigated with fragrant smoke.....he should eat, while drinking, green fruits and salted fragrant flesh and other sauces agreeable to the wine and proper to the seasons."

Beds, seats and clothes were kept not only clean but were perfumed with fragrant articles.

अनुकूलविहगन्धं स्वस्तीर्णं सुखं शयनम् ।

च. शा. ८, ९

"....a pleasant smelling, well spread and comfortable bed...."

शयनासनास्तरणप्रवरणानि कुमारस्य मृदुचुम्बुद्विहगन्धीनि स्युः ।

च. शा. ८, १०

"The bed, seats, spreads and covers meant for the child should be soft, light, clean and fragrant."

As regards personal hygiene, odoriferous articles were made use of very profusely to impart fragrance and charm to every part of the body.

After the preliminary purificatory process to cleanse every part of the body which is likely to exhale fœtor (mouth, tongue, teeth, throat, skin etc), these parts were perfumed with sweet-smelling preparations.

To impart sweet and delicious smell to the breath and counteract the fœtor-oris, use was made of nutmeg, musk, mallow, betel-nut, cloves, cubeb-pepper, good betel-leaves, camphor and small cardamom.

The skin of the whole body was given a friction cleansing with fragrant articles to remove the stench of perspiration and after the final cleansing of the body by the general bath, the body was anointed with fragrant applications and scented with exquisite perfumes. And finally in addition to the sartorial covering, a garland of the seasonal and sweet smelling flowers was worn.

The oils used for nasal drops or for the hair were also scented. Fragrant tooth powder and pastes were also made. Even

the tooth stick was selected from the sweet-smelling trees or sometimes the tooth-stick was made fragrant by artificial methods.

Cigars whether used for daily habitual smoking or for therapeutic purposes, always contained a good number of fragrant articles. One of the purposes of its use in daily regimen was to remove the offensive smell of the breath.

Special attention was paid to make the food and drinks savory and the culinary art was highly developed in conformity with this superb sense of fragrance and aroma.

Thus the olfactory aesthetic sense was ever given dominant consideration in the regimen of personal hygiene.

The special gift of the keenness of the olfactory organ of the orientals and the luxuriance of aromatic, balmly, musky, and odoriferous products in the East influenced not only the personal, social and public hygiene methods and manners of the people, but also played an important part in the diagnostic clinical methods and therapeutic measures of Āyurveda.

Physical examination, as described in modern science, entails the use of four methods or procedures—inspection, palpation, percussion, and auscultation. It means according to Caraka

प्रत्यक्षान्नु खड्ग रोगतत्वं बुभुक्षुः सर्वैरिन्द्रियैः सर्वानिन्द्रियाधार्मगतुरक्षरीगतान् परीक्षेत अन्यत्र रक्षणानात् ॥ च. वि. ४, ७

“Seeking to know the nature of a disease by direct observation, the physician should explore by means of all his sense-organs except the tongue, the entire field of sensible data presented by the patient's body”.

In the modern clinical methods of physical examination, the eyes (inspection), hands (palpation) and ears (percussion and auscultation) are used extensively, but the use of the smell sense is rarely made. We can understand the aversion to the use of the taste organ in modern clinical methods, but it becomes difficult to understand why

olfaction is not used freely in the investigation. Probably the gradual under-development of olfactory power especially among the occidentals is one of the reasons.

Ayurveda developed a special science of smell-diagnosis; *osmics* or *osmology* to be made use of in clinical medicine.

This method of physical examination is given an important place in the investigation of normal or abnormal secretions and excretions of the body viz., 1. Vital essence; 2. Semen; 3. Mother's milk; 4. Menstrual fluid; 5. Sputum; 6. Stools; 7. Urine; 8. Vaginal discharge; 9. Vomit; 10. Discharge from the wound; 11. Sweat.

Objective or subjective symptoms pertaining to smell were found useful in the diagnosis of nearly all disease-conditions. Osmatic domineering signs are rather considered the pathognomic of the disorganization of the Pitta constituency of the body. Important osmatic references are found in the following disease condition.

१. ज्वर; २. रक्तपित्त; ३. युक्तम; ४. प्रमेह; ५. शोथ; ६. अर्श; ७. ग्रहणी;
८. काष्ठ; ९. अतिवहार; etc.,

In the section on prognostic indication nearly the whole chapter is devoted to the subject of *osmology* (गन्धविज्ञान) bearing on prognosis.

The therapist made use of the savoury and fragrant articles in general and specially in all disorders of Pitta types. Meticulous care was taken in pharmaceutics to flavour every medication. Potions or poultices, linctus or lozenges all were made sweet and pleasant in smell. The number of aromatic drugs in Caraka is more than one hundred.

The concept of good and bad smell was so popularly recognized that bad smell was considered very despicable. Caraka while despising the condition of sterility or barrenness compares it to the tree with bad smell.

अच्छायाश्चैश्वर्याश्च निष्कलश्च यथा द्रुमः ।

अनिष्टगन्धश्चैश्वर्यश्च निरपत्यस्तथा नरः ॥

च. चि. २ (१), १६-१७

"The man without progeny is like a solitary tree that yields no shade, which has no branches, which bears no fruit and is devoid of any pleasant odour".

Tropical countries are rich in fragrant plant products and hence we find that these countries have the most aromatic dishes and pleasant pharmaceutic factories. They cater to this outstanding trait of the orientals. Nose, thus is very highly respected and valued in the East though it is but tiny in size. This may be one of the reasons of nose-cutting as a very subtle way of vendatta – may be due to its possession inside of this valuable apparatus of evaluating the environmental atmosphere. And this nose-cutting gave an opportunity to Suśruta of originating the operation of Rhinoplasty.

CHAPTER XII

ROUTINE OBSERVED DURING THE PURIFICATORY PROCEDURES

The excerpts given below describe the various observances and regulations that are necessary in the preparation of the patient for undergoing the procedures of purification. The excerpts describe both the sanitary as well as the aesthetic aspects of the subject.

ततस्तं पुरुषं स्नेहवेदोपपन्नमनुपहतमनमभिसमीक्ष्य सुखोदितं सुप्रजीर्णमक्तं शिरःस्नात-
मनुलिप्तगार्त्रं स्रग्धणमनुहृतवस्त्रंवीरं त्वतामिद्वन्गुरुवृद्धवैद्यानर्चितवन्तमिष्टे नक्षत्रतिथिकरणमुद्धर्ते कारयित्वा
ब्राह्मणान् स्वस्तिवाचनं प्रयुक्ताभिगामीरिभिमन्त्रितां मधुमधुकुसैन्धवकाणितोषदितां मदनफलकषायमात्रां
पाययेत् ॥ च. सु. १५, ९

"After the person has taken the oleation and sudation procedures, and is of tranquil mind and has slept soundly, digested the food well, taken a full bath, anointed the body, worn a garland and untorn clothes, worshipped the deities, the fire, the Brāhmaṇa, the Gurn, the elders and the physicians, he should be administered a dose of the decoction of emetic-nut together with honey, liquorice, rock-salt

and treacle sanctified by the benediction of the " Svastivācana " chantings of the Brāhmins performed under an auspicious constellation, day, Karṇa and Muhūrta'.

ROUTINE OBSERVED DURING VARIOUS OTHER PROCEDURES

Procedure for Discharging a Patient

बलवर्णोपपन्नं चैनमनुपहृतमनममभिसमीक्ष्य सुखोचितं सुप्रजीर्णमक्तं शिरःस्नातमनुलिप्तगात्रं त्रिवि-
णमनुपहृतवस्त्रवीनमनुकृगालङ्कारालङ्कृतं सुहृदां दर्शयित्वा ज्ञातीनां दर्शयेत्, अथैनं कामेष्वावसृजेत् ॥

च. सू. १५, १७

"On finding that he has regained his vitality, complexion and cheerfulness of mind, and after he has slept happily, digested his food well, taken a full bath, and painted the body with sandal, has put on garlands and untorn clothes, and has adorned himself with befitting ornaments, he should be shown round to his kinsmen after being presented to his friends. Thenceforward, he should be left to resume his normal activities"

Attending a Wine party

शरीरकृतसंस्कारः शुचिहृतमगन्धवान् ।
प्रावृत्तो निर्वलवैद्यैर्यथार्हं मगन्धिभिः ॥
शिवं च वक्षिष्यन्वी रतः । भरणभूषतः ।
देवैश्च ज्ञातोऽप्युच्य मृष्ट्रवा मङ्गलमुत्तमम् ॥

च. नि. २४, ११-१२

"Having attended to the internal and external needs of the body and having bathed and painted himself with fragrant sandal, a person must wear clean clothing along with ornaments and fragrances suitable to the seasons. Then decking himself with garlands of variegated flowers and with jewels and ornaments, he should worship the gods and the Brāhmaṇas and touch the most auspicious articles".

Going For a Dinner

नास्त्वपाणिर्नास्नातो नोपहृतवासा नाजपित्वा नाहुत्वा देवताभ्यो नानिरूप्य विदुभ्यो नादत्वा
गुरुभ्यो नोपाश्रितेभ्यो वापुष्यगन्धो नामास्त्री नाप्रक्षालितपाणिपादवदनो नासुदयुक्तो नोदङ्मुखो न विमनाः,

च. सू. ८, २०

"Partake not of a meal without wearing a jewel on the hand,

without having had a bath: clad in tattered clothes, without saying your prayers, without performing the Homa, without offering to the household gods and the manes, without first feeding the elders, guests and dependants, unscented, ungarlanded, without cleansing the hands, feet and face, with unclean mouth, with the face towards north, listlessly;.....'

The Student Beginning his Work

कल्पः कृतक्षणः प्रातस्तथायोपशुभं वा कृत्वाऽवश्यं कमुपशुभोदकं देवर्षिगोत्राङ्गणगुरुं ब्रह्म-
चार्येभ्यो नमस्कृत्य ।

च. वि. ८, ७

"The student who is healthy and has consecrated all his time for study, should rise at dawn, or while yet a portion of the night is left and having performed the necessary ablutions and having saluted the gods, the seers, the cows, the Brāhmanas, the guardians, the elders, the adepts and the teachers."

The Student's Initiation

एवं विषमध्ययनार्थिनमुपस्थितमगिराधविभुमाचार्योऽनुभाषेत—उदगाग्ने शुक्लपक्षे प्रशस्तेऽर्द्धेन तिथि-
हस्तश्रवणाश्वयुजादश्वयुजमेव नक्षत्रेण यममुपगते भवति क्षितिं कल्याणे कल्पणे च करणे मैत्रे सुर्ते मुण्डः
कृतोपवासः स्नातः काषायवस्त्रधृतिः सगन्धहस्तः समिधोऽग्निमज्यमुपकेपनमुदकुंभान् माल्यदामक्षीपहिण्य-
हेमरजतमणिमुक्ताविश्वक्षौम-गन्धीन् कुशकाजसर्वपाक्षतांश्च शुक्लानि सुमनांसि प्रथिताप्रथितानि मेघ्यान् भक्ष्यान्
गन्धांश्च घृष्टानांशयोपनिष्ठस्वेति ॥

च. वि. ८, ९

"The teacher should address himself to the disciple who has thus come to him desiring to study and who sits close in reverential mood, and say unto him, 'Come and sit at my feet for instruction, in the northern solstice of the year, in the bright half of the month, on an auspicious day, when the moon is in conjunction with the constellation of Pusya or Hasta or Śravaṇa or the Aświnī, and in an auspicious Karṇa and Muhūrta, having taken the tonsure, having fasted and bathed and clad in brown garment, bringing in your hands fragrant articles and dry twigs, fire, ghee, sandal paint and water-pots, also flower-garlands, a lamp, gold, ornaments of gold, silver, precious stones, pearls and corals, silken garments, sacrificial stakes, also holding in your hand the sacrificial grass, fried paddy, white mustard seeds and white rice grains, and flowers strung in garlands as well as loose, and pure articles of food and rubbed sandal paste".

without having had a bath: clad in tattered clothes, without saying your prayers, without performing the Homa, without offering to the household gods and the manes, without first feeding the elders, guests and dependants, unscented, ungarlanded, without cleansing the hands, feet and face, with unclean mouth, with the face towards north, listlessly;.....'

The Student Beginning his Work

कल्पः कृतक्षणः प्रातस्तथायोपशुभं वा कृत्वाऽवश्यं कमुपशुभोदकं देवर्षिगोत्राङ्गणगुरुं ब्रह्म-
चार्येभ्यो नमस्कृत्य ।

च. वि. ८, ७

"The student who is healthy and has consecrated all his time for study, should rise at dawn, or while yet a portion of the night is left and having performed the necessary ablutions and having saluted the gods, the seers, the cows, the Brāhmanas, the guardians, the elders, the adepts and the teachers."

The Student's Initiation

एवं विषमध्ययनार्थिनमुपस्थितमगिराधविभुमाचार्योऽनुभाषेत—उदगाग्ने शुक्लपक्षे प्रशस्तेऽर्द्धेन तिथि-
हस्तश्रवणाश्वयुजादश्वयुजमेव नक्षत्रेण यममुपगते भवति क्षितिं कल्याणे कल्पे च करणे मैत्रे सुर्ते मुण्डः
कृतोपवासः स्नातः काषायवस्त्रधृतिः सगन्धहस्तः समिधोऽग्निमज्यमुपकेपनमुदकुंभान् माल्यदामक्षीपहि-
हेमरजतमणिमुक्ताविश्वक्षौम-गन्धीन् कुशकाजसर्वपाक्षतांश्च शुक्लानि सुमनांसि प्रथिताप्रथितानि मेघ्यान् भक्ष्यान्
गन्धांश्च घृष्टानाशयोपनिष्ठस्वेति ॥

च. वि. ८, ९

"The teacher should address himself to the disciple who has thus come to him desiring to study and who sits close in reverential mood, and say unto him, 'Come and sit at my feet for instruction, in the northern solstice of the year, in the bright half of the month, on an auspicious day, when the moon is in conjunction with the constellation of Pusya or Hasta or Śravaṇa or the Aświnī, and in an auspicious Karṇa and Muhūrta, having taken the tonsure, having fasted and bathed and clad in brown garment, bringing in your hands fragrant articles and dry twigs, fire, ghee, sandal paint and water-pots, also flower-garlands, a lamp, gold, ornaments of gold, silver, precious stones, pearls and corals, silken garments, sacrificial stakes, also holding in your hand the sacrificial grass, fried paddy, white mustard seeds and white rice grains, and flowers strung in garlands as well as loose, and pure articles of food and rubbed sandal paste".

towards the east or the north in the folds of a new garment, and declaring that it (the child) salutes the twice-born headed by the gods, the father of the child should give it two names: one name denoting the constellation under which it was born and the other of intended meaning”.

Procedure at Kutipravesha

अथोदगयने शुक्ले तिथिनक्षत्रपूजिते ।
मुहूर्तकरणोपेते प्रशस्ते कृतवापनः ॥
वृत्तिस्मृतिबलं कृत्वा श्रद्धयानः समाहितः ।
विधूय मानसाब्दघान् मैत्रीं भूतेषु चिन्तयन् ॥
देवताः पूजयित्वाऽग्रे द्विजातीन् प्रदक्षिणम् ।
वेवगोश्रावणं कृत्वा ततस्तां प्रविशेत्कुटीम् ॥

च. वि. १/१, २१-२३

“Thereafter, during the sun’s northern course, in the bright half of the month, when the day and the constellation are propitious and the Muhūrta and Karana are favourable, the man seeking rejuvenation, should, being shaved, enter the retreat, having fortified himself in his resolution and purpose, full of faith and single-mindedness, having cast off all sins of the heart, cherishing good will for all creatures, having first worshipped the gods and then the twice-born, and having performed the circumambulation of the gods, the cows and the Brāhmaṇas’.

Going to Surgical Room For Operation

ततः प्रशस्तेषु तिथिकरणमुहूर्तनक्षत्रेषु दध्यक्षताजपानरत्नैरग्निं विप्रान् भिषजश्चार्ययित्वा, कृतबलिमङ्गल-
स्वस्तिवाचनं लघु भुक्तवन्तं प्राञ्चुख्यं तुरमुपवेश्य.....

सु. सू. ५, ७

“Thereafter when the day, Karana Muhūrta and constellation are propitious, the patient who has taken a light meal, should be seated with his face towards the east, after worshipping the fire, the Brāhmaṇas and the physicians by curds, rice, eats and drinks and jewels, and after performing auspicious rites and Svastivācana and after offering oblations”.

CHAPTER XIII

REGULATIONS OF SOCIETY AND STATE REGARDING TREATMENT

The Vaidya is very often nick-named "the brother of the God of death" (ममराजप्रहोदरः) but the society as well as the state took every possible measure to prevent him from emulating the example of his comfrere, the god of death. The rules of the society and of the state of those days seem to have been so strict that the Vaidya was afraid of taking responsibility in serious or incurable diseases. He was caught between the horns of a dilemma where his natural humane feeling and strict rules regarding his responsibility often ran counter to each other.

The responsibility cast on the Vaidya to treat only curable cases helped in evolving the science of prognostics to determine the curability or otherwise of a disease to an astonishing degree. This was the stage when the development of clinical methods made great progress.

The necessity and importance of the knowledge of prognostics is greatly emphasised in the Caraka Samhitā in order to help the physician to steer clear of the risks in undertaking incurable cases.

साध्यासाध्यविभागज्ञो ज्ञानपूर्वो निश्चितकः ।

काले चारक्ये कर्म चरकस्यैवमेव ॥

अथविद्यायश्चाहानिमुपकल्पमर्त्यदम् ॥

प्राप्नुयाच्चित्तं वैद्यो योऽज्ञात्वा सनुपाचयेत् ॥

च. सू. १०, -७८

"The physician who knows the differential diagnosis between the curable and the incurable diseases and begins treatment with full knowledge of the case and in time, obtains success for his effort without fail. But the physician who undertakes to treat incurable diseases will invariably suffer loss of income, tarnish his learning and fame, and earn for himself disrepute and unpopularity to boot."

The whole section consisting of 12 chapters of the Indriya-sthāna shows the marvellous development of minute clinical observations indicating the prognostics of the case. Dreams, omens, the messenger,

environmental circumstances besides a host of such things were taken into account in the prognostic calculation. All this shows the meticulous care they took in order to draw a recognisable line between the curable and the incurable diseases.

A Vaidya is advised not to undertake to treat certain conditions. Incurable disease is one of such conditions.

दोषावमेवमन्यद्रः भेषजं प्राप्तकालमप्यातुरस्य नरेविधस्य कुर्यात् । तद्यथा—अनपवादप्रतीकारस्या-
नस्यापरिचारकस्य वैद्यमानिश्चयस्यासुयकस्य हि ब्राधमरुचेरिक्षीणबलमोक्षशोणितस्याबाध्यरोगोपहतस्य सुमूर्धु-
लिङ्गान्वितस्य चेति । एवंविधं ह्यातुरमुपवरन् भिषक् पापीयसाऽयशसा योगमृच्छतीति ॥ च. वि. ३, ५

“However, neither the therapy of elimination of morbid matter nor any other kind of medication should be administered even when indicated, to the following kinds of patients: one who has not justified his honour when questioned, one who is without wealth or attendants, one who fancies himself to be a doctor, one who is fierce-tempered, one who is envious, one who takes keen pleasure in vicious acts, one who has lost his strength, flesh or blood to an inordinate extent, one who is afflicted of an incurable disease, and one who presents the prognostic signs. By treating such a patient, the physician incurs on probrious odium”.

The physician was also warned against treating persons who were regarded as anti-social and evil in nature, such as:—

व्याधशःकुलिकपतितप्रायकारिणः च नः प्रतिकर्तव्यम् । सु. सू. २, ८

* * * * *

चण्डः पादमिको भीरुः कुतर्षो व्यग्र एव च ।

सदा भिषगां द्वेषा तद्विष्टः शाकपीडितः ॥

यादृच्छति सुमूर्धुश्च विहीनः कर्मण्यथ यः ।

वेी वैद्यविद्वन्थश्च श्रद्धाहीनः सुश कृतः ॥

भिषजाभक्षयेयश्च नो कस्याभिषविषदा ।

एतालुपचरन् वयो बहून्दोषानवाप्नुयात् ॥

एभ्योऽन्ये समुपक्रम्यां नराः भवैरुपक्रमैः ।

अवस्थां प्रविभज्यैषां वर्ज्यं कार्यं च वक्ष्यते ॥

च. सि. २, ४-७

“The man that is fierce, rash, cowardly, ungrateful or fickle, who is a hater of good persons kings and physicians or he who is

environmental circumstances besides a host of such things were taken into account in the prognostic calculation. All this shows the meticulous care they took in order to draw a recognisable line between the curable and the incurable diseases.

A Vaidya is advised not to undertake to treat certain conditions. Incurable disease is one of such conditions.

दोषावमेवमन्यद्रः भेषजं प्राप्तकालमप्यातुरस्य नरेविधस्य कुर्यात् । तद्यथा—अनपवादप्रतीकारस्या-
नस्यापरिचारकस्य वैद्यमानिश्चयस्यासुयकस्य हि ब्राधमरुचेरिक्षीणबलमोक्षशोणितस्याबाध्यरोगोपहतस्य सुमूर्धु-
लिङ्गान्वितस्य चेति । एवंविधं ह्यातुरमुपवरन् भिषक् पापीयसाऽयशसा योगमृच्छतीति ॥ च. वि. ३, ५

“However, neither the therapy of elimination of morbid matter nor any other kind of medication should be administered even when indicated, to the following kinds of patients: one who has not justified his honour when questioned, one who is without wealth or attendants, one who fancies himself to be a doctor, one who is fierce-tempered, one who is envious, one who takes keen pleasure in vicious acts, one who has lost his strength, flesh or blood to an inordinate extent, one who is afflicted of an incurable disease, and one who presents the prognostic signs. By treating such a patient, the physician incurs on probrious odium”.

The physician was also warned against treating persons who were regarded as anti-social and evil in nature, such as:—

व्याधशःकुलिकपतितप्रायकारिणः च नः प्रतिकर्तव्यम् । सु. सू. २, ८

* * * * *

चण्डः पादमिको भीरुः कुतर्षो व्यग्र एव च ।

सदा भिषगां द्वेषा तद्विष्टः शाकपीडितः ॥

यादृच्छति सुमूर्धुश्च विहीनः कर्मण्यथ यः ।

वेी वैद्यविद्वन्थ श्रद्धाहीनः सुशङ्कितः ॥

भिषजाभक्षयेयश्च नो कस्याभिषविषदा ।

एतालुपचरन् वयो बहून्दोषानवाप्नुयात् ॥

एभ्योऽन्ये समुपक्रम्यां नराः भवैरुपक्रमैः ।

अवस्थां प्रविभज्यैषां वर्ज्यं कार्यं च वक्ष्यते ॥

च. सि. २, ४-७

“The man that is fierce, rash, cowardly, ungrateful or fickle, who is a hater of good persons kings and physicians or he who is

befitting ornaments, he should be shown round to his kinsmen after being presented to his friends. Thenceforward, he should be left to resume his normal activities."

क्रियातिवृत्ते जठरे त्रिदोषे चाप्रशास्यति ।
ज्ञातीन् समुद्देशं दारान् ब्रह्मणाश्रुपतीन् गुरुन् ॥
अनुज्ञाप्य भिषक् कर्म निदध्यात्संशयं ब्रुवन् ।
अक्रियायां भ्रुवो मृत्युः क्रियायां संशयो भवेत् ॥
एवमाख्याय तस्येदमनुज्ञातः सुहृद्वरः ॥

च. वि. १३, १७५-१७९

"When the abdominal disease due to the gathering of fluid has gone beyond the stage of treatment or if the humoral tridiscordance has not got subdued, the physician should summon the patients' kinsmen, well wishers, wives, brahmins, state authorities, and elders and speak to them about the precarious condition of the patient.

If not treated the patients' death is certain. But if treated by poison-therapy he may have a chance to survive. Having spoken thus and being permitted by the patients well-wishers to proceed (he must administer poison to the patient combined with his food and drink)".

The last citation shows that when a bold Vaidya wanted to give a chance of cure in a case believed to be incurable by means of special therapeutic measures, he had to take permission of the kinsmen, friends, wife and others of the patient. This bold and rather out of the ordinary treatment was undertaken and full opportunity was given to ambitious Vaidyas to attempt to bring the hitherto incurable diseases within the compass of curability.

Still the Vaidya had to be very careful and shrewd enough not to take any responsibility for failure on his shoulders. In case of any doubt about success in treatment, the Vaidya, to be on the safe side would declare the case to be incurable before the patient's relations and then begin his treatment.

संपूर्णरूपं क्षयजं दुर्बलस्य विवर्जयेत् ।
नकोत्थितं बलवतः प्रत्याख्यायाचरेत् क्रियाम् ॥

च. वि. १८, १४९

"The patient suffering from cough born of consumption with all the symptoms of consumption fully developed, and who is debilitated should be considered incurable but if the cough is of recent origin and the patient is strong, the treatment should be undertaken despite declaring it to be of the incurable type."

Or he might take up the treatment of such cases only if the patient's kinsmen approached the Vaidya and besought him for treating the case.

अथ चेज्जातयस्नस्य याचेरन् प्रणिपाततः ।
रसेनाद्यादत्तिन्मृगान्नास्मै दद्याद्विबोधनम् ॥

च. इ. ९ १६

"If the patient's kinsmen beseech the physician with great importunity for treatment, he should prescribe the diet of meat-juice; but no purificatory therapy should be administered."

Thus in keeping with the spirit of the age and the social conventions prevalent then, great restrictions were placed on the physician's choice of undertaking cases for treatment. Yet there was a large scope left for his higher nature and humanity to function as a source of social helpfulness and guidance by his being allowed to give society the advantage of his skill and learning after declaring the hazardous nature of his efforts and absolving himself of responsibility for failure despite his best endeavours. In no society pertaining to any age can a physician be expected to behave otherwise. Thus judged by any standard, the humanity, goodness and wisdom of the ancient physician are beyond question. All the rules and regulations of society as well as the State were only calculated to prevent the Vaidya from all chance of injury to public health as well as to his own reputation and profession.

CHAPTER XIV

LEGENDS AND MANTRAS

Legends and myths are the most valuable treasures in a country's national heritage and India is one of the richest countries

in this respect. Such legends are not just fantastic creations of idle minds to be ridiculed and discarded. They contain in them the beginnings of the ideology and concepts that have influenced, in their own way, the future course of their civilization. They are the crude attempts at embodying in verbal form the vague inklings into the dawn of knowledge, when sublime nature awed the insignificant looking man, and the joy of life let loose the fancy of man inspired by the virginity of life.

Belief in the magic effects of certain words uttered in a fixed order with prescribed intonation is a common feature in the history of early civilization of all countries and India is no exception to the rule. Where experience and reason failed to solve a mystery to a common man magic and Mantras, based on the belief in the supernatural, stepped in.

India in Caraka's time was ahead of other countries in the progress of civilization especially in the science of medicine. Medical knowledge had attained the scientific stage and yet we find traces of legend. Caraka continued the practice of absorbing these legends in his work in the illustration of medical beginnings and facts. For instance, the legend of the origin of fever ascribing it to the anger of God Śiva is quite in consonance with the idea of heat, the dominant pathological effect of feverish condition (अ. वि. ३. १५-२५) Fever was the most common disease and Śiva, the God of Destruction, naturally came to be associated with the most common cause of death viz., fever. Traces of the belief in the curative effects of specially arranged hymns and incantations called Mantras are also found in Caraka Samhitā. The traces are however faint and more often than not, the Mantra treatment is accompanied by the rational and scientific treatment. Such mantras form part of psychic therapy and the inclusion of these in his work brings it more into a line with advanced views than the absence of them would have done. And we must not forget that these mantras were meant to be uttered by only those persons who possessed certain qualities in them. Thus the sanctity of mantras was strictly preserved.

The mystical effect of mantras is still being made use of

especially in snake poison treatment.

The legends in Caraka Samhitā are interesting and we find that shorn of their imaginative adornments, some of them appear to be literary versions of some scientific truth.

The origin of fever is ascribed to the heat caused by the fire which poured from the anger of Rudra at the destruction of Dakṣa's sacrifice of old. The destruction of the above sacrifice was also the cause of many other diseases. The description is interesting as there is a symbology in these mythical representations and legends where are certain diseases ascribed to various causes. (Caraka Nidāna VIII-11).

"It was during the destruction of the sacrifice of Dakṣa that Gulma first arose in the past as the result of the agitated bodily movements gone through by the assembled persons who in their panic ran helter skelter in all directions running, swimming, racing, flying, jumping etc. Also at this time, the urinary and dermic disorders took their rise as the result of the oblations that were eaten, the insanities as the result of fear, alarm and grief, the epilepsies as the result of the pollution by various kinds of unclean beings. As regards the fever we have already described how it arose from the forehead of great God Śiva; from the heat induced by fever arose the disease Hemothermia. As for consumption it took its rise from the excessive sex indulgence of the lord of constellations i. e. the Moon".

In spite of the legendary lore which is found here and there in the Samhitā. Caraka never loses true scientific insight and as he says in Vimāna-sthāna Chapter III verses 24, 27, "calamities never result from any factor other than unrighteousness." In these verses he logically traces the origin of disorder to a series of acts of unrighteousness, one following the other; how indulgence leads to lassitude lassitude to greed etc. and how deterioration of the quality of food and exercise made man the prey to various disorders. The primogenesis of diseases is thus very aptly narrated. In Nidāna VII-19 Caraka clearly states:

नैव देवा न गन्धर्वा न पिशाचा न राक्षसाः ।
न चान्ये स्वयमक्लिष्टमुपकृष्यन्ति मानवम् ॥

"Neither gods nor the Gandharvas, neither the goblins nor the demons, nor aught else, torment the man who is not tormented of himself."

Just as Hippocrates in Europe separated religion from medicine, Caraka did the same in India. Thus Caraka was the pioneer of the scientific medicine in India. This clearly shows what a rational outlook Caraka had in spite of the legends and mantras we find in his work.

In Caraka Cikitsā I (4) verses 39-49, we get an interesting narration of the diseases of gods and demi-gods being cured by the Aświns who are the physicians of gods. It is they who re-united the sacred head of sacrifice. They treated Pūṣan whose teeth had become loosened, Bhaga who had lost his eye-sight and Indra whose arm had got stiffened. Soma, the Moon God was cured of his consumption, and Cyavana was restored to his youth.

The cause of consumption of the Moon god is very aptly ascribed to his submergence in passion and the consequent weakness. The scientific reason and astronomical phenomenon are robed in mythological garb. As the disease first befell the king of stars it is called राजवृक्ष्मा, the royal disease (च. चि. ८. ३-१२). But immediately following this myth he says that consumption was driven away by Aświns to this mortal world finding its four etiological factors viz., over-exertion, suppression of natural urges, wasting and fourthly irregular diet.

In Cikitsā XIX 4 the origin of diarrhea is ascribed to the impairment of the gastric fire by the use of cow's flesh (which is heavy, hot and disagreeable) at Dakṣa's sacrifice.

In Cikitsā-sthāna XXIII, 4-5 there is an interesting derivation of the word poison (विष) and this is connected with a famous mythological event.

अमृतार्थं समुद्रे तु मध्यमाने सुरासुरैः ।
जज्ञे प्रागमृतोत्पत्तेः पुरुषो वीरदर्शनः ॥ ४ ॥

वीप्ततेजाश्चतुर्दशो हरिश्चैशोऽनलेक्षणः ।

जगद्विषणं तं दृष्ट्वा तेनासौ विषसंज्ञितः ॥ ५ ॥

च. वि. २३

“When the ocean was being churned by the gods and the demons for the sake of ambrosia, there emerged prior to the nectar, a fearful looking person. He had a resplendent appearance, four fangs tawny hair and fiery eyes and the world despaired at the sight of him. Hence he was known as ‘Viṣa’, poison, the despair of the world.”

This derivation is more significant than the English derivation of poison from ‘potio’, to drink.

Charms and talismans etc., formed part of the treatment, though mostly for psychic effect. In Cikitsā-sthāna, chapter XXV verses 3-9 we get descriptions of exogenous and endogenous wounds and Caraka explains the predominant difference by the difference in their treatment. Here too, Caraka lays emphasis on the treatment of exogenous wounds by medications when they do not yield to the ‘Charms’ and other measures due to their association with endogenous morbid factors.

Even when describing the properties of the substance like oil, Caraka sometimes introduces the traditional legend in support of his statement. (Sūtra-sthāna chap. XXVII verse 288).

As it was enjoined upon a sacrificer to perform it not in an unclean condition, Caraka gives some Mantras which would purify the person.

नाशु चैरुतमाज्याक्षततिलकुशसर्षपैरभि जुहुयादात्मानमावीभिराशासानः, अभिमै नापगच्छेच्छरीरा-
द्रायुर्मे प्राणानादधातु विष्णुर्मे बलमादधातु इन्द्रो मे वीर्यं शिवा मां प्रविशन्स्वाप आपोद्विष्टेत्यगः स्तुषेत् द्विः
परिमृज्येष्टौ पादौ चाम्युक्ष्य मूर्धनि खानि चोपस्पृशेदङ्गिरात्मानं दृष्ट्वं शिरश्च ॥ २८ ॥ च. सू. ८

“Pour not the libations of holy ghee, barley, til, small sacrificial grass and rape-seed in the sacrificial fire in an unclean condition. Bathe to the incantation of the sacrificial texts beginning with the words. ‘May the fire not leave me’, ‘May the wind grant me life’, ‘May the Viṣṇu grant me strength’, ‘May Indra grant me virility’,

and "May the waters enter me auspiciously", 'The waters are indeed the source of happiness' etc., and having laved the lips twice and having besprinkled the feet, touch the body with water on the cavities of the head, on the heart and on the top of the head".

The psychic effect of mantras was accepted in all spheres of human activity and a person desiring a hero son, is advised by Caraka to utter the following mantra before engaging oneself in procreating act.

“अहिरसि आयुरसि सर्वतः प्रतिष्ठासि धाता त्वा ददतु विधाता त्वादधातु ब्रह्मवर्चसा भव” इति ।

“ब्रह्मा बृहस्पतिर्विष्णुः सोमः सूर्यस्तथाऽश्विनौ ।

भगोऽथ मित्रावरुणौ वीरं ददतु मे सुतम् ॥”

इत्युक्त्वा संवसेयाताम् ॥ ८ ॥

च. शा. ८

“Then the following charm should be uttered apostrophizing the child that is to be:- ‘Thou art the day; thou art the life; thou art well-established from all sides. May the dispenser dispense to thee Brāhmic splendour;’ May Brahmā, Bṛhaspati, Viṣṇu, Soma, Sūrya and the two Aświns, as also Bhaga, Mitra and Varuṇa, bless me with a hero son. Having uttered this, the two should unite”.

In the next few lines the charms to be uttered by a woman desiring a son are given.

At the time of delivery, the following charm is prescribed to be uttered into the ears of the pregnant woman by her favourite lady attendant.

“क्षितिर्जलं वियत्तेजो वायुर्विष्णुः प्रजापतिः ।

सगर्भो त्वां सदा प्राप्नुवैशल्यं च दिशन्तु ते ॥

प्रसूय त्वमविक्षिप्तमविक्षिप्ता शुभानने ।

कार्तिकेययुतिं पुत्रं कार्तिकेयाभिरक्षितम्” इति ॥ ३९ ॥

च. शा. ८

“May the earth, the waters the heavens, the light, the wind, Viṣṇu and Bṛhaspati ever protect you and the child, and may they direct the delivery. O! auspicious faced one, bring forth without distress to yourself or to him, a son who will possess the lustre of Kārtikeya and have the protection of Kārtikeya.”

The potion to be given to a patient to whom emesis is to be administered should be put in a measure pot and the following mantra should be recited over it.

“ॐ ब्रह्मदक्षाश्विहरेन्द्रभूवन्नाकानिलानलाः ।

ऋषयः सौषधिग्रामा भूतसङ्काश्च पान्तु ते ॥

रसायनमिवर्षीणां देवानाममृतं यथा ।

सुधेवोत्तमनागानां भेषज्यमिदमस्तु ते ॥”

इत्येवमभिमन्त्र्योद्भूमुखं प्राङ्मुखं वाऽऽतुरं पाययेन्छलेऽमज्वरगुल्मप्रतिश्यायार्ति विशेषेण पुनः पुनरापित्तागमनात्, तेन साधु वमति; च. क. १, १४

“Om, may Brahmā, Dakṣa, Aświns, Rudra, Indra, the earth, the moon, the sun, the gods of the wind, the fire, the sages, the host of drugs, and all living creatures protect thee. Even as the vitalizers are to the sages, and ambrosia to the best of Nāgas, so may this medicine be unto thee. Having thus sanctified the potion the patient with his face turned to the east or the north must be made to drink again and again and vomit until the bile is seen to come out especially in persons afflicted with fever of the Kapha type, Gulma or coryza. This is the proper method of the procedure of Emesis”.

In Cikitsā-sthāna chapter XXIII, verses 81-91, Caraka speaks of the ‘major perfumed elephant antidote.’ This remedy was taught to Kubera by Tryambaka, the three-eyed Śiva. Caraka describes the wonderful effects of this antidote and goes even so far as to say that ‘The house containing this antidote cannot be entered into by evil spirits afflicting children or by Rākṣasas or hobgoblins, nor can evil charms or black magic gain entry into the house.’ He then prescribes the following efficacious holy incantation to be uttered during the preparation.

मम माता जया नाम जयो नामेति मे पिता ॥ ९० ॥

सोऽहं जयजयापुत्रो विजयोऽग्र जयामि च ।

नमः पुरुषसिंहाय विष्णवे विश्वकर्मणे ॥ ९१ ॥

सनातनाय कृष्णाय भवाय विभवाय च ।

तेजो वृषाकपेः साक्षाच्छेजो ब्रह्मेन्द्रयोर्यमे ॥ ९२ ॥

यथाऽहं नाभिजानामि वासुदेवपराजयम् ।

मातुश्च पाणिग्रहणं समुद्रस्य च शोषणम् ॥ ९३ ॥

अनेन सत्सङ्गाक्येन सिध्यतामगदो जयम् ।
हिलिमिलिप्तपृष्टे रक्ष सर्वमेषजोत्तमे स्वाहा ॥ १४ ॥

“My mother's name is Jayā (victory) and my father is also Jaya (victory) and I am Vijaya (victory). The son of victory, Jayā and Jaya and hence I conquer. Salutations to the lion among beings, to god Viṣṇu, the maker of the world, to the eternal Kṛṣṇa, the source and the glory of life. I am the very light of Viṣṇu and that of Brahmā, Indra and Yama. As surely, as I have never heard of the defeat of god Vāsuveda and of one wooing one's own mother's hand and of the drying up of the ocean, so surely may this antidote achieve success by the truth of these words. O! thou best among remedies allied with hili-mili, give protection. Praise be unto thee!” Thus has been described the antidote known as ‘Mahāgandha-hasti’.

Thus although we find traces of legends and charms in the scientific work, they are there with a purpose; the legends to connect some prescriptions in the hoary tradition or to make the comparatively dry subject interesting, and the charms and mantras to create psychic effect, a principle accepted by even modern scientists.

CHAPTER XV

KAMPILYA AS A CENTRE OF LEARNING

An unimposing hamlet called Kampila on the banks of the Ganges 20 miles N. E. of Fatehgarh in the district of Farrukabad (79. 37 E, 27. 33 N) seldom noticed by a passer-by was once a city teeming with population. It was a capital city and a seat of a famous university possessing an international reputation. It covered an area of 28 to 30 miles. Excavations have unearthed many a gold coin and statues bearing testimony to a highly civilized and flourishing city in its halcyon days.

During the Mahābhārata period, the city was at its zenith. It was the capital of the Pāñcāla Deśa ruled over by king Drupada, the father of Draupadī, the pivotal character round whom the giant epic of Mahābhārata evolved. It is narrated in the epic that Drupada and Droṇa were co-students, but when Drupada succeeded to his father's

throne he denounced this friendship with Droṇa, who was but a poor Brahmin, on the ground of inequality of status. Droṇa then became the preceptor of Kaurava and Pāṇḍava princes in the military science and when their education was complete, he asked the princes in his Gurudakṣiṇā to defeat Drupada and bring him as a captive. First Kauravas tried their hands and failed. Then the Pāṇḍava princes invaded and succeeded in bringing Drupada as a captive at the feet of their preceptor Droṇa. Droṇa reproachfully reminded king Drupada of the present reversal of status of each of them. He further added that as he wanted to revive the old friendship, and friendship can be maintained only if there is equal status of both, he would mercifully give Drupada half the territories now conquered by him. And thus accordingly he kept the northern half of Pāṇcāla with Ahikṣetra as his capital and returned the southern half to Drupada with Kāmpilya as the capital.

आश्रमे क्रीडितं यत्तु त्वया बाल्ये मया सह ।
 तेन संवर्धितः स्नेहः प्रीतिश्च क्षत्रियर्षभ ॥ ६७ ॥
 प्रार्थयेयं त्वया सख्यं पुनरेव जनाधिप ।
 वरं ददामि ते राजन्राज्यस्यार्धमवाप्नुहि ॥ ६८ ॥
 अराजा किल नो राज्ञः सखा भवितुमर्हसि ।
 अतः प्रयतिते राज्ये यज्ञसेन मया तव ॥ ६९ ॥
 राजासि दक्षिणे कूले भागीरथ्याहमुत्तरे ।
 सखायं मां विजानीहि पाञ्चाल यदि मन्यसे ॥ ७० ॥

द्रुपद उवाच—

अनाश्रयमिदं ब्रह्मन् विक्रान्तेषु महात्मसु ।
 प्रीये स्वयाऽहं त्वत्तश्च प्रीतिमिच्छामि शाश्वतीम् ॥ ७१ ॥

वैशंपायन उवाच—

एवमुक्तः स तं श्रेणो मोक्षयामास भारत ।
 सत्कृत्य चैनं प्रीतात्मा राज्यार्धं प्रत्यपादयत् ॥ ७२ ॥
 माकन्दीमथ गङ्गायास्तीरं जनपदायुताम् ।
 सोऽध्यावस्रीदीनमनाः कांपिल्यं च पुरोत्तमम् ॥
 दक्षिणांश्चापि पाञ्चालान्यावर्त्तमण्वती नदी ।

महाभारत, आदिपर्व, अ. १३८

“Because in childhood you have played with me in the hermitage, O best among Kṣatriyas! our mutual love and affection have developed.

O lord of men, I desire friendship with you again and so I give you a boon, O king, that you should get half of the kingdom.

O Yajñasena! As a king cannot be a friend with one who is not a king, I have tried to put you on the throne.

You shall be a king on the southern bank of the Bhāgīrathī and I on the northern one. O Pāñcāla, if you agree, consider me to be your friend”.

Drupada said, “O Brahman, there is no wonder for such a thing with regard to powerful great souls! I am pleased with you and I expect perpetual love of you.”

Vaiśampāyana said, “Having told him thus, O Bharata, that Droṇa made him free; and being pleased he honoured him and gave him half of the kingdom.

He occupied the territory of Mākandī with a thousand villages on the bank of the Ganges; and the other with humiliated mind occupied the southern Pāñcālas upto the river Carmanvatī, with Kāmpilya, the best among cities”.

It was at Kāmpilya that the Swayamvara ceremony of Draupadī took place and even today women recite this episode in the wedding. A stray tourist who cares to pay a visit to this forgotten place is proudly shown the ruins of the palace of Drupada and the spot where the Swayamvara of Draupadī took place.

Even in the Rāmāyaṇa period, centuries older than the Mahābhārata period we find that Kāmpilya was a city of note. During that period it was ruled by a king named Pravahana Jaibali who, like Janaka Videhī, was a scholar-king. Competitive disputations often took place between scholars of विविडा and काम्पिल्य and the king was also a preceptor at the university of Kāmpilya an event probably unparalleled anywhere in the world.

ॐ । जनको ह वैदेहो बहुदक्षिणेन सन्नेजे; तत्र ह कुरुपञ्चालानां ब्राह्मणा अभिसमेता बभूवुः ।

बृहदारण्यकोपनिषद् ३-१-१

“Om. Janaka, Emperor of Videha, performed a sacrifice in

which gifts were freely distributed. Vedic scholars from Kuru and Pāñcāla were assembled there".

श्वेतकेतुर्ह वा आरुणेयः पञ्चालानां परिषद्माजगाम । स आजगाम जैवर्णि प्रवाहणं परिचारय-
माणम् । बृहदारण्यकोपनिषद् ६-२-१

"Śvetaketu, the grandson of Aruṇa, came to the assembly of the Pāñcālas. He approached Pravahaṇa, the son of Jivala, who was being waited on (by his servants)".

We can trace the glory of Kāmpilya even further. Even in the Vedic times it was a prosperous and well known city. In Yajurveda (23-18) we find a reference to Kāmpilya stating that beautiful and highly educated ladies resided there.

अम्बेऽञ्जम्बिकेऽम्बालिके न मा नयति कश्चन । स सत्यश्चक्रः सुमद्रिकां काम्पीलवासिनीम् ।

यजु. २३, १८

"Ambā ! Ambikā ! Ambālīkā ! No one is taking me away. The sorry horse will lie beside another, as Subhadra, the dweller in Kāmpila".

काम्पीलवासिनीम्—काम्पीलनगरे हि सुमगाः पुरुषा विदग्धाः स्त्रियो भवन्ति ।

उज्ज्वट

Purāṇas say that Pārvatī, the wife of lord Śiva, made Kāmpilya her residence when there was a family quarrel with her husband.

Śrīmad Bhāgavata states that there was once a powerful king named Bharmyāśva. He had five sons among whom one was Kāmpilya after whom the capital was named Kāmpilya, and the country is called Pāñcāla Deśa.

भर्म्याश्वास्तनयस्तस्य पञ्चासन्मुद्गलादयः ॥ ३१ ॥

यवीनरो बृहद्विषुः काम्पिल्यः सृजयः सुताः ।

भर्म्याश्वाः प्राह पुत्रा मे पञ्चानां रक्षणाय हि ॥ ३२ ॥

विषयाणामलमिमे इति पञ्चालसंज्ञिताः ।

श्रीमद्भागवत स्कं. ९, अ. २९

"His son was Bharmyāśva. He had five sons, Mudgala and others—Yavīnara, Br̥hadiṣu, Kāmpilya and Sṛijaya. They were called

Pañcālas because Bharmyāśva said, 'These sons of mine are able enough to protect my five dominions.'

There are also five rivers in the Pañcāla Deśa viz., the Ganges, the Kālindī, the Jumna, the Chambal and the Rāmgangā. May be these five rivers also contributed to the nomenclature of the country through which they flowed. Draupadī is very often referred to as Pāñcālī as she hailed from Pāñcāla.

Jain literature is full of references to Kāmpilya. It was this city that was selected by the Jain's first Tirthaṅkara Ṛṣabhadevajī as his preaching centre. When the Bāhubali the son of Ṛṣabhadevajī renounced the world, the prince of Pāñcāla also followed suit. Vimalnath the thirteenth Tirthaṅkara was born at Kāmpilya and he made it his headquarters till his old age. His birth, his penance, his preachings are associated with Kāmpilya and hence Jain pilgrims make it a point to visit this holy place. Vimalnath was not an ordinary citizen. He was the son of king Kṛtavarmā and queen Jayaśyāmā of Kāmpilya who ruled over it long before Drupada. While once on hunting expedition he saw snow in the lake melting and this reminded him of the short-livedness and meaninglessness of life. From that day onwards he resorted to penance and made himself immortal by his preachings of truth.

Mahāvīra Swāmī the last and 24th Tirthaṅkara also stayed and preached here for a considerable time. Jain literature is also full of references to Draupadī and her Swayamvara.

Some scholars ascribe to Kāmpilya the honour of being the birth-place of Kapila Muni, the propounder of Sāṅkhya philosophy. Pāṇini the great grammarian refers to Kāmpilya and Pañcāla.

विशेषणानां चात्रातेः । पाणिनि, सिद्धांत कौ. १, २, ५२

पञ्चाला रमणीयाः ।

पञ्चाला जनपदः ।

"The Pāñcālas are beautiful. The Pāñcālas are a country".

He mentions Sāṅkāsya along with Kāmpilya. Probably Sāṅkāsya

was a suburb of Kāmpilya, set up and created in honour of Sāṅkāśa (संकाश), a prominent citizen.

धन्वयोपधाद्भुजः ४. २. १२१

धन्वविशेषवाचिनो यकारोपधाच्च देशवाचिनो वृद्धा दुग् स्यात् ।

सांकाश्यकः काम्पिल्यकः

४-२-१२१

In the Mahādhara commentary of Brhājātaka we find an area of Kāmpilya referred to as Kapitthika. Thus Kāmpilya, Sāṅkāśya and Kapitthika are more or less the same place. The very place which was referred to as Sāṅkāśya by the Chinese traveller Fa-hi-en in the 7th century A. D. was referred to as Kapitthika by Hu-en-tsang, another Chinese traveller in the 8th century. Even today we have Sankisa (Sāṅkāśya) and Kathiya (Kapitthika) hardly twenty miles apart. This easily leads us to conclude that upto the 8th century of the Christian Era, Kāmpilya, though shorn of its greater glory, preserved its unity as one city.

To the list of luminaries that Kāmpilya produced or attracted can be added the name of Mahārṣi Ātreya, the propounder of the medical knowledge which has descended to us as Caraka Saṁhitā, which makes a specific mention of Kāmpilya and Pāṇcāla.

जनपदमण्डले पञ्चालक्षेत्रे द्विजातिवराभ्युषिते काम्पिल्यराजधान्यां भगवान् पुनर्वसुरात्रेयोऽन्तेवासिन-
णपरिवृतः पश्चिमे वर्षमासे गङ्गातीरे वनविचारमनुविचरन्निष्ठमग्निवेशमब्रवीत् ॥ च. वि. ३, ३

The Samāsa-pradhāna method of Pāṇcāla was a reputed method in literature. The great astronomer Varāhamihira is another gift of Kāmpilya to the world. Great scholar graduates of Kāmpilya like Agniveśa, Bhela, Jatūkarna, Parāśara, Hārīta, Kṣārapāṇi, Kāṅkāyana, Kumāraśira, Vāryovida of Kāśī and a host of others carried the fame of Kāmpilya to the four corners of the world and proved its claim to be the alma mater of universal fame before the days of Taxila.

CHAPTER XVI

VARIOUS SCHOOLS OF THOUGHT IN CARAKA'S TIMES

As has been already stated, the period to which Caraka belongs was an age of great intellectual unrest in India. There were bold and independent thinkers propounding their views in the country beginning with materialists (प्रत्यक्षपराः) and the evolutionists (परिणामवादिनः) upto the theists and the Vedantins.

In the Caraka Samhitā we find, in addition to the Nyāya, the Vaiśeṣika and the Sāṅkhya schools which are of course the basic schools on which medicine builds its supports, mention of other schools including the following:

1. प्रत्यक्षपराः Materialists that recognise only what is observable by the senses as true.
2. आगमपराः Those that believe implicitly in revelation alone.
3. श्रुतिपराः Same as the above.
4. स्वभावपराः The Naturalists that believe that things happen according to some natural compulsion.
5. यदृच्छापराः The Accidentalists.
6. परनिर्माणपराः The Creationists that believe in a creator.

Suśruta describes the various schools of thought prevalent in his time while summing up the various opinions regarding the original force of the world.

“स्वभावमीश्वरं कालं यदृच्छां नियतिं तथा । परिणामं च मन्यन्ते प्रकृतिं पृथुदक्षिणः ॥

सु. शा. १, ११

“The broad-visioned philosophers regard Prakṛti, the original creative force, variously as nature, god, time, accident, instrumentality and evolutionary force”.

All these schools of thought are referred to in connection with the establishment of the existence of the immortal spirit that is the cause of things and the soul of man.

Rebirth and Destiny

This faith in the immortal soul led to the conclusion

that the actions of man must beget a force by which the results of these actions accrue to their author, thus releasing a stream or succession of such causes and effects. This stream is naturally to take effect in a series of births, for we see people dying having initiated actions and before they could reap their fruit.

Then came the question: are past actions or their effects called Daiva (दैव) all powerful so as to leave no scope for escape or counteracting in a succeeding life? Ātreya says, "certainly not". Their effectiveness depends on their innate strength and if in this life we can act so powerfully as to counteract the past action we can avert its results. Thus he gives man a message of hope whereby he can be the master of his destiny in a great measure. Man can endeavour in this life and perform action (पुण्यकार) that can set at nought the evil force released by past evil action. He can thus also release a beneficent force for the shaping of the future life too. This is a rational basis and justification for the propounding of a science of healing, for if this life was so irredeemably predetermined, no effect of therapeutics would avail in the curing of ailment. But the truth being otherwise, there is scope for fresh initiative in this life and so, therapeutic action commensurate with the causative factor of disease can neutralise it. This is a definite contribution to metaphysical as well as scientific thought.

च. वि. ३, ३३

Sin And Holiness, And Hell And Heaven

The acts of commission and omission either in the present life or in the past which resulted in pain and suffering were known as bad actions (दुष्कर्म) or sins (पतक). These led to suffering in this life and to hell after death. Similarly, acts that make for happiness here as well as in the after-life were known as good actions (सत्कर्म), religious name for which was holiness (पुण्य). If one practised such holy behaviour and actions one was sure to be happy both in this life and in a heaven after life (स्वर्ग).

यानि चान्यान्येव विभजानि कर्माणि सत्तामविगर्हितानि स्वर्ग्याणि ॥

च. सू. ११, ३३

"Whatever other actions are there similar to these and such as are not disapproved of by good men, lead to the attainment of heaven."

Hell is mentioned with reference to men who are so wicked that even converse with them leads to hell.

नरो नरकपाती स्यात् तस्य संभाषणादपि ।

च. सू. १, १३०

“Even by converse with him man falls into hell”.

Rebirth

The belief in rebirth or reincarnation is common to all schools of Indian thought. Even the protestant sects like the Buddhists and Jains believe in Karma and rebirth, though not in a creator. Caraka is therefore in line with general Hindu thought and he adduces a proof of it in the experience of the memory of their past lives by some exceptional people. This is recollection of past births (जन्मस्मरणम्). Cakrapāṇi, the commentator, thinks that a passage referring to this idea means also that men in this very life sometimes come back to life after death, their souls having been taken away by the messengers of Yama (the god of death) by a mistake caused by the identical names of persons.

इक्ष्वाकमनमितश्च्युतानामिति ॥

च. सू. ११, ३०

Naturally enough, the corollary is that if a soul can go out of the body and re-enter it in this very life and continue its sense of identity, it can do so within the bodies of its succeeding incarnations too.

CHAPTER XVII

THE FINAL RENUNCIATION

According to the Indo-Aryan tradition of living, the aim of life is fourfold comprising righteousness (धर्म), wealth (अर्थ), pleasures (काम) and liberation (मोक्ष). The achievement of this fourfold aim constitutes full living. In the Caraka Samhitā too, the pursuits of life are given in a slightly modified form. They are reduced to three (धनैवणा) the pursuit of wealth, (प्राणैवणा) the pursuit of life and (परलोकैवणा) the pursuit of the other world. Though these three are the natural pursuits of life, the supreme purpose of life and also of the science of therapeutics, is the attainment by man of his total liberation from the trammels of nature such as body, senses and mind and to live as pure spirit being one with and merged in the soul of the world known

as Brahma. Such an individual as has attained this is called ब्रह्मपूतः, viz., he that has become Brahma, meaning pure spirit.

When man has lived the life of pain and pleasure and his senses have been satisfied in a great measure and their clamour for pleasure and sensation have abated, he must resort to solitude and meditation over the causes of being and detach himself from his senses, body and mind. He should cease to have all perceptions of pain and pleasure. He thus gets merged into the original essence that is all-pervasive, that is a state of pure being, a state free from all sensations, a knowledge and awareness beyond the scope of mind.

The Sāṅkhya, the Vedānta and the Yoga systems uphold this condition as the final beatitude which every individual should attain; this is called मोक्ष or a liberated condition.

Caraka describes this last stage of renunciation in similar terms (Śārīra I-154 and 155).

The path leading to that state is also set out in elaborate detail. This is called the upward leading path.

“We shall now describe the upward leading path of those who seek liberation. The seeker after final emancipation, who has seen the vanity of the world, should first make his approach to a teacher whose teaching he should then put into practice. Thus he should tend the ceremonial fire, study the sacred law-books, understand their meaning and taking them for his guide should mould his conduct thereby. He should seek the good and avoid the evil, he should eschew the company of the wicked, he should speak only that which is true, conducive to the good of all creatures, gentle, reasonable and well considered. He should regard all creatures as himself. He should avoid all reminiscence, desire, questing and discourse with women and renounce all possessions retaining only the following appurtenances: a loin cloth for cover and an ochre-colored garment, and for mending it a case of sewing needles. For the sake of cleanliness he may carry a water pot and as a mark of his order a mendicant's staff, and a bowl for collecting alms. He may substitute alms by such natural food as is easily available in the woods and just enough to maintain life. If he is

fatigued, he may take his rest on a bed improvised with dry fallen leaves and weeds, but he should not do this habitually. He may keep an arm rest as an aid in meditation. He should dwell in the woods and have not roof over his head, avoiding drowsiness, sleep, laziness etc. He should check desire and aversion to sense-objects. He should exercise circumspection in sleeping, staying, moving, seeing, eating, recreation and in fact in the movement of every individual limb. He should be indulgent alike to honourable treatment, adulation, contempt and humiliation, and should be able to put up with hunger, thirst, fatigue, strain, cold, heat, wind, rain, pleasure and pain. He should be unmoved by grief, depression, self-conceit, affliction, arrogance, greed, attachment, envy, fear, anger etc. He should look on egoism etc., as causative of suffering and on the macrocosm and microcosm in the matter of creation etc., as being identical. He should dread procrastination and should never feel disinclined to practise yoga. He should be of an enthusiastic frame of mind. He should bend all his powers of understanding, resolution and recollection towards final emancipation; he should restrain the senses by means of the mind and the mind by means of the spirit and the spirit by itself. He should constantly revolve in the mind the categories giving rise to the body and its members and should resolve that everything that has causation is not the self, is fraught with pain and is transient. He should regard activity as being tainted with evil, and hold the conviction that in the renunciation of all things is true happiness. This is the path leading to final emancipation; straying from this, one is bound. Thus have we described the upward leading steps." (Śārirā V. 12).

Again to bring about that final renunciation of individuality, the following path is prescribed.

"From the accession of the pure understanding all these proceed; the right seeking of the company of the good; the total avoidance of the wicked, continence and abstinence and various austerities, the study of the sacred scriptures, meditation, love of solitude; aversion to sense-pleasures, perseverance in the path of liberation, supreme determination, the non-beginning of actions and the complete annihilation of those already done, the desire to quit the world, humility, dreading attachment, the fixing of the mind and understanding in

the self and the investigation of the true nature of things—all this procures from the recollection of the true nature of the self. The true recollection comes from the beginning with the right seeking of the company of the good and ending with supreme determination. Having recollected in mind the true nature of all things, man gets relieved from suffering. The methods of inducing recollection are said to be rightly recalling the circumstances and the appearance by comparison and contrast, by concentration of the mind, by practice, by the acquisition of knowledge and by re-hearing. Recollection is so called because by dwelling upon what was seen, heard or otherwise experienced, it collects again the fullness of past experience in the mind. This is the only road, consisting of the power of true recollection which has been indicated for final liberation by those who have attained liberation. Those who set out on this road do not return. This road has been described by the yogis as the path of yoga, and by the liberated seers who have had all the knowledge of philosophy, as the path of liberation. All that results from causes, is pain-giving, is other than the self and transitory. Such is not an offspring of the self; yet the self-sense obtains there, so long as the true understanding is not born; but the sage, knowing 'I am not this and this is not mine' transcends everything. In that final renunciation all sensations together with their root, cause, as also cogitation, contemplation and resolution, come to an absolute termination. Thereafter the individual self having become one with the universal self is no longer seen as particularised, being rid of all qualities. He has no longer any distinguishing mark. The knowers of Brahma alone have knowledge of this; the ignorant cannot understand it'.
(Śāṅkhya VIII, 143-153.)

CHAPTER XVIII

PEOPLE AND THEIR PROFESSIONS

There were four main divisions in which people were classified, each class having a particular type or trend of work in general. Caraka permits the study of medical science to the first three groups of people, viz., (ब्राह्मण, राज्ञः, वैश्य) each class being obliged to make use of this science for a particular purpose.

The Śūdra class is debarred from the study of the medical science by Caraka while Suśruta concedes to the Śūdra class the general study of medicine, only debarring them from the Mantra (मन्त्र) therapy.

The Śūdra class was considered the lowest in the society and was assigned the service of the higher classes. Rasāyana therapy was neither taught to them nor were they given the benefit of this kind of therapy.

In ceremonies, they were not sanctioned the performance of होमविधि but they had to be satisfied with mere salutations नमस्कार to the Brāhmins.

The order of sequence was:— the Brāhmins first, Rājanya second, Vaiśya third and Śūdra last

ब्राह्मण	महर्षि
राजसूय	देवर्षि
वैश्य	राजर्षि
चारण (सूत्र)	संख्य
कृषि	वैखानस
पाशुपाल्य	बालखिल्य
वाणिज्य	मुनि
राज उपसेवा	मिश्रक वि. ८ १४९
आश्रित	संन्यासिन् शा. ५-१२
उपाश्रित	योगी शा. १-१५१
पौरजनपदा	सांख्य शा. १-१५१
व्यवहार उपजीविन्	अजप
श्रोत्रिय	अविप
राजसेवक	गोप
वैश्या	वनवासिन्
पण्यजीविन्	भृश
अथर्वण	पाचक
चाण्डाल	स्नापक
तस्कर	संवाहक
शाकुन्तिक च. सू. २९-१०	शूरी सू. ५-१०३
अन्तःवसायि (चाण्डाल)	नगरी-च. सू. ५-१०३
ऋषि	सिद्ध-सू. ८-१८

आचार्य-सू. ८-१८

भ्रूणहन्तृ-सू. ८-१९

क्रीड

पौरोगवर्ग-(सूदशास्त्राभिज्ञ) वि. २४-१९

कुम्भकार-सू. ९-१३

इष्वास (धातुष्क) सू. १०-५

Sinful professions to be avoided

(1) सू. ५-१०४

वृत्त्युपगयान्निषेवेत ये श्युर्धर्मविरोधिनः ।

शममध्ययनं चैव सुखमेवं समश्नुते ॥

(2) सू. ११-५

यानि चान्यान्यपि सतामविगर्हितानि कर्माणि

वृत्तिपुष्टिकराणि विद्यात् तान्यारभेत कर्तुम् ।

Four Castes

ब्राह्मण

क्षत्रिय

वैश्य

शूद्र

शूद्र was almost excluded from medical profession.

(1) There is no mention of शूद्र in the description of classes of people and purpose for which they should practice medical profession.

(2) For procreation procedure he was debarred from performance of वेमवधि.

He was to be satisfied with नमस्कार.

शूद्रस्तु नमस्कारमेव कुर्यात् (देवामिद्रिजगुरु-
त्पत्तिवर्धयेत्यः)

Susruta allows admission : to शूद्र but मेव is not to be given. Kaśyapa allows this but they have to be assistants only. Vāgbhaṭa revolts against the debarring of शूद्र.

ब्राह्मण क्षत्रिय वैश्य—They held the position in the order of their enumeration.

सुश्रुत sanctions the admission of शूद्र to medical profession, only debarring him from मेव training.

Kaśyapa describes that for subordinate medical work they should be allowed medical training.

गीत-
वादित्र-
उल्लासक-
(स्तोत्र)-
श्लोक-
गाथा-
आख्यायिका-
इतिहास-
पुराण-

कुशलाः पारिषदाः

च. सू. १५-७

गन्धर्व

यक्ष

राक्षस

पिशाच

तपस्विन्

मिश्रुक

नि. ७-१०

नि. ७-११

वि. ८-१४९

बाह्यक

पङ्कव

चीन

शूलीक

यवन

शक

वि. ३०-३१६

प्राच्य

सैन्धव

अदमक

अवन्तिक

मलयवाहिन्

दक्षिण

उत्तरपश्चिम

मध्यदेश

द्रविडान्धक

इ. ५-२९

CHAPTER XIX

ASTROLOGICAL CHART

आतुरशूतः अरिष्टसूचकानि दिनानि सु.-सु. 29-19	उन्माद- ग्रह- दिनानि च. चि.-9-21	विष- चिकित्सा न सिध्यति. चि.23-159	दूतागमन अरिष्ट 5-12-69 चरक.	कुटि- प्रवेश च. चि. १/१, २१	शुभ- तिथिः पंचांगानुसारेण सु. सु. 2-9	अभ्यास- तिथिः सु. सु. 2-9
---	--	--	--------------------------------------	--------------------------------------	---	------------------------------------

शुक्र						
1		देवाः	मध्याह्ने अर्धरात्रे	मध्याह्ने अर्धरात्रे		द्विसन्ध्यम्
2		रक्षः- पिशाचाः			शुभ	
3		रक्षः- पिशाचाः			शुभ	
4	4			4	रिक्ता-त्याज्य- शून्य	
5		ब्रह्मराक्षसाः			शुभ	
6	6	ऋषयः				
7		यक्षाः			शुभ	
8		रक्षःपिशाचाः	8			नहि
9	9	ऋषयः		9	रिक्ता-त्याज्य- शून्य	
10		पितरः			शुभ	
11		यक्षाः			शुभ	
12		गन्धर्वाः				
13		देवाः			शुभ	
14		गन्धर्वाः		14	रिक्ता-त्याज्य- शून्य	नहि
15		ब्रह्मराक्षसाः				नहि

सर्वारम्भ-
प्रशस्त

		आतुरदूतैः अरिष्टसूचकानि दिनानि सु.-सू. 29-19	उन्माद- ग्रह- दिनानि च. चि.-9-21	विष- चिकित्सा न सिध्यति. चि. 23-159	दूतागमन अरिष्ट 5-12-69 चरक.	कुटि- प्रवेश च. वि. १/१, २१	शुभ- तिथिः पंचांगानुसारिण	अभ्यास- तिथिः सु. सू. 2-9
कृष्ण								
	1						शुभ	
	2		रक्षःपिशाचाः				शुभ	
	3		रक्षःपिशाचाः				शुभ	
	4	4			4		रिक्ता-स्याज्य- शून्य	
हारीत	5						शुभ	
कृष्णपक्षे	6	6	ऋषयः					
रोगचिकित्सा	7						शुभ	
सदा कर्तव्या	8		रक्षःपिशाचाः					नहि
8-3-12	9	9	ऋषयः		9		रिक्ता-स्याज्य- शून्य	
	10		पितरः				शुभ	
	11						शुभ	
	12		गन्धर्वाः					
	13							
	14		गन्धर्वाः		14		रिक्ता-स्याज्य- शून्य	नहि
	15		पितरः				स्याज्य	नहि
		सन्धि- दिनेषु		पक्ष- सन्धिषु				

Ref.	अ.र.	मास	राशि	नक्षत्र	पक्ष
अध्ययन-अभ्यास 1- 8-24					
वसन-विरेचन 1-15- 9 1-15-17				इष्ट	
उपनयनविधि 3-8- 9	उदगयने			तिष्य = पुष्य हस्त श्रवण अश्वयुज् = अश्विनी	शुक्र
सूक्तिकागारप्रवेश 4-8-35				प्रशस्तनक्षत्रे	
कुटिप्रावेशिक 6-1-21	उदगयने			पूजिते	शुक्र
नागबला-उद्धरण 6-1/2-11		तपसि तपस्ये वा			
औषधसंस्कार 6-10-38 उन्मादे प्रदेहधूपन				पुष्य	
औषध-उद्धरण 6-10-50 शुनः पित्तम्				पुष्य	
महागन्धहस्ति- 6-23-82 नामागदः				पुष्य	
चूर्णाजन 6-26-248				चित्रा	
मदनफलग्रहण 7- 1-13				पुष्य, मृगशिर अश्वयुज्	
निरुहकल्प 8- 3-12				प्रशस्त	शुक्र

तिथि	योग	करण	मुहूर्त	वार	क्रतु	चंद्र	ग्रहण	समय
नष्टचन्द्रायां तिथौ न							महाग्रहोप- गमने न	मध्यदिने-अपराह्णे रात्रौ सन्ध्ययोर्न
इष्ट		इष्ट	इष्ट					
प्रशस्ते अहनि	प्रशस्त	कल्याण	मैत्रअनुकूल (शिवभुजगादयः)				कल्याणे शश्विनि	
”	प्रशस्त	कल्याण	”				”	
पूजित		प्रशस्त	प्रशस्त				प्रशस्त	
			चल = इन्द्र					

मैत्र

वसन्तग्रीष्मयो-
रन्तरे

पुण्य

प्रशस्त

प्रशस्त

THE PHILOSOPHICAL CONCEPTS IN CARAKA

CHAPTER I

THE BEGINNING OF METAPHYSICS AND MEDICINE

Pain in every form generally and in the form of disease and death particularly, has awakened the latent potencies in man for survival and growth and for conquest of evil. In that effort for survival he has had to dive deep into the depths of his physical and spiritual being in order to discover the laws that brought into being and that continued to govern his total make-up. He could not rest content until he knew the way into, the way through and the way out of life. It became a vital necessity to understand life and human life in particular.

In the pursuit of pure science and in astronomy the impulse may be one of heightened curiosity or wonder; but the sense of pain presented to man in the forms of diseases and death, brings him face to face with reality in a tremendously vital manner. Faced with such an imperative call, the alternative to answering which was his annihilation, he gathered up all his strength, sincerity and determination, and worked out a realistic, practical and effective solution of the problem.

In a way, religion and philosophy are primarily therapeutic in their nature and origin. The first dose of medicine ever administered or taken by man must have been an incantation, divine invocation or the sacred remnant of food offered to superhuman powers. It is no wonder, therefore, if a highly evolved race like the Aryans of ancient India, started solving the problems of human existence under the threat of disease and premature death. Suffering wrings out an appeal for help from the human heart to the all powerful gods; and the answering hand, be it from a heaven above, or the heaven within the soul of man, unfolds the elaborate vision of thought before the earnest and hungering gaze. This is exactly how the visitation of disease upon people devoted to virtue and meditation set the ancient sages thinking about the way out of it until they saw with the eye of understanding their refuge in Indra, the king of the immortals. (Sūtra I, 17)

The Sources of Knowledge in Caraka—Aptopadesa

In the Caraka Samhitā in common with the sciences and arts of ancient India, revelation is given a great place among the sources of knowledge. They believed that when men with pure hearts and chaste minds engaged themselves in sincere and deep meditation, with a view to human welfare and without the slightest trace of selfish interest, truth reveals itself to them. That is to say that they believed in the ultimate revelatory nature of knowledge, of the supersensual knowledge in particular. In the Caraka Samhitā (सू. ११, १७) the sage Ātreya, propounds four sources of knowledge viz., (1) Direct perception, (2) Inference, (3) Revelation or testimony of good men, and (4) Common sense. This last is peculiar to this treatise and is illustrated by examples which do not make it any different from inference. Revelation or reliable declaration called also authoritative teaching is given the first place in the order of stating the means of knowledge. Describing the nature of the persons whose declarations are above suspicion the sage Ātreya says:

रजस्तमोभ्यां निर्मुक्तास्तपोज्ञानबलेन ये ।
 येषां निकलममलं ज्ञानमव्याहृतं सदा ॥
 आत्माः शिष्टा विबुद्धास्ते तेषां वाक्यमसंशयम् ।
 सत्यं, वक्ष्यन्ति ते कस्मादसत्यं नीरजस्तमाः

च. सू. ११, १८-१९

“Men who have freed themselves from passion and ignorance by means of spiritual endeavour and knowledge, whose understanding embracing the past present and future is pure and at all times unclouded—it is these that are the authoritative, the learned and the enlightened. Their word is unimpeachable and true. Why will such men, devoid as they are of passion and ignorance, give utterance to untruth ?”

Such are the seers of the Vedic utterances which are above question, the sure guide to knowledge of the highest kind.

According to some schools of Hindu philosophy, the Veda is authority because it is eternal and does not owe its being to human authorship. But in Caraka, its validity rests on the trustworthy

nature of the sages of whom it is the testimony. Sage Ātreya goes even further and says, 'Trustworthy tradition of knowledge is Veda. But even other statements made by people who have conducted investigation in any field of knowledge which are not conflicting with the Veda and which are approved by good men and are conducive to human welfare should be considered authoritative.'

तत्राप्तागमस्तावद्वेदः यश्चान्योऽपि कश्चिद्वेदार्थादविपरीतः परीक्षकैः प्रणीतः शिष्टानुमतो लोकानु-
ग्रहप्रवृत्तः शास्त्रवादः स चाऽऽप्तागमः । (सू. ११, २७).

This is a healthy extension which bespeaks the catholicity and sweet reasonableness of the propounders of the science.

Pratyakṣa

'Pratyakṣa' i.e. direct perception, is the next source of knowledge. The actual contact of the external senses of the man with the objects of the world is essential to it. But that is not enough, for, in the absence of the mind, simple contact of the sense-organ with an object has been found to produce no knowledge. This Pratyakṣa brings inevitably in its wake the question of the subtler mechanism of the mind without whose contact no perception is possible. The recording agent of perception is the mind known as 'sattva' in Caraka. Ātreya declares, 'the mind is higher than the senses and is known as 'sattva'. Some call it 'the conscious agent'. Its perceptions which are joy, grief etc., are the incentives to the functioning of the senses". (Sūtra VIII. 4) "The senses are able to perceive their objects only when they are led by the mind" (Sūtra VIII. 7).

The way that the sense-organs come into contact, each with its particular proto-elemental sense-object such as the eye with visual object, the ear with sound etc., is explained on physiological basis. Though the five sense-organs, physiologically, are each of them the products of all the five natural proto-elements, ether, light etc., yet each sense organ has in its construction one proto-element in preponderance and it perceives that proto-elemental sense-object in the external world. Thus the eye which has a preponderance of light perceives the light outside in the form of color, shape etc. The ear which has the preponderance of the ether in its construction perceives sound in the

outside world and so forth. The contact of the same proto-element in the sense organ with that in the world is a physical commingling. (Sūtra VIII. 14). The mind acknowledges and receives the impression and passes it on to the intellect or the discriminatory faculty called the "Buddhi". Then begins the interaction between the tetrad of the subtle group of inner mechanism of knowledge resulting in action. The tetrad consists of the mind, the mind-objects, the understanding and the spirit (Ātmā). This aggregate is the source of good or bad activity or for cessation of activity (Sūtra VIII. 13). "Perception, is defined as the cognition, definite and immediate, arising from the conjunction of the soul, the senses, the mind and the sense-objects". (Sūtra, XI-20)

The sense-organs are also liable to perceive, under abnormal conditions, wholly non-existent things which is called hallucination i. e. perceiving things not real, "atattvābhiniveśa" (अतत्त्वाभिनिवेश).

Anumana or Inference

Having thus declared that the knowledge that results from the chain of contact of the self, mind, senses and the sense-objects, is known as direct perception, Ātreya goes on to define the next source inference or Anumāna (अनुमान).

Medicine is a science which propounds the laws that govern life and physical and chemical properties of drugs. Though its observations are basically direct, yet conclusions and generalisations regarding invisible and abstract data have to be made with the help of inferential methods. Thus the need to supplement sense observations by inference was inevitable. The limited scope of knowledge drawn purely from observation is expressed by Ātreya thus: "On this question the wise man should give up the negative attitude and even scepticism. Why? Because the visible is limited; while there exists a vast unlimited world which is invisible and of which we know by the evidence of scripture, inference and reason. As a matter of fact even the very senses by whose agency direct observations are obtained are themselves outside the range of observation.

Further even a perceivable object escapes observation under

the following conditions viz., when it is either too close or too remote from the observer, when it is obstructed by other objects, when there is some defect in the perceiving sense-organ, when the observer's attention is elsewhere, when the object is merged in the mass when it is overshadowed by something else, or lastly when it is microscopic.

Hence it is an unfounded statement to make that only the visible exists and nothing else". (Sūtra XI, 7-8.)

The knowledge pertaining to the three parts of time i. e. the past, the present and the future can be inferred from the basis of a person's direct knowledge of things. Inference therefore is firstly based on direct perception. The inferring of the unobserved from the observed is based on antecedent knowledge of their concomitance. ' The inferring of the existence of fire in a place by the perception of smoke is an inferential knowledge of an unobserved thing in the present time. Similarly there is the inference of the sexual act of a woman in the past by observing her present state of pregnancy. And thirdly, there is the inference of the prospect of a good crop in the future judging by the nature of the seed sown, based on past experience of their relationship. Inference here is seen understood and defined in its most rudimentary form based on the law of association. The same inference is illustrated again while elaborating the technical terms used in learned disputation between physicians as well as in clinical investigations where inference is said to be reasoning based on correlation of cause and effect. One should infer the condition of the gastric fire by the power of digestion, the conditions of the patient's vitality or strength by his capacity for exercise and the condition of his sense-organs by his perceptions of sound etc. "

Yukti

Lastly "Yukti" (युक्ति) i. e. correlation of a set of causes or circumstances with an effect based on common-sense, is held to be another source of knowledge. This may also be called the law of probability for, as the example given shows, one can foresee an effect under a given set of circumstances, with a great degree of probability. By a combination of the factors of water, agricultural labour, seeds and the effects of season, there results the crop; or where there is a

combination of the six elements constituting the living body, the embryo will take its rise. The combination of the lower and upper churning sticks and the act of churning brings out fire. 'Yukti' means a combination. So a combination or a set of circumstances or things being responsible for an effect is by itself a factor of knowledge, though the actual procedure of arriving at knowledge is by the same law of association that governs 'inference'. One may call it a 'compound inference' as against the simple inference of a cause from an effect or vice versa. From many and varied factors one result is inferred. Perhaps the application of this method was found particularly useful in therapeutic and pharmacological realms. The master sums up the merit of yukti in the following verse: 'that is known as yukti which is a means of knowing the past, present and future, by which the mind perceives results brought about by many and various factors and by means of which all three objectives of life can be achieved. The four objectives are Dharma, Artha, Kāma and Mokṣa. The last objective is evidently not achieved by yukti' (Sūtra XI. 25).

The Inner Instruments of Knowledge And The Nature Of The Mind

Both for knowledge and action, the self requires the association of the instruments, viz., the mind, the intellect and the organs of perception and conation (Śārīra I-56). The organs of perception and those of action are the external instruments in knowledge as well as in action. And the triad of internal organs of the Buddhi, Ahaṅkāra and the mind, both cognitive and conative, are the internal or inner instruments. All the thirteen necessarily function in knowledge as well as in action. There are some who hold that the inner organs are only two, i. e. the Buddhi and mind, and that the ego or Ahaṅkāra has been not included. But it is not right to hold so for, while describing the successive evolution of Buddhi etc., Ātreya says, "The Buddhi is born of the Avyakta (अव्यक्त), the unmanifest; from Buddhi, the sense of ego is born". (Śārīra I. 66) This is in accordance with the Nyāya school of philosophy which holds that the self is not the factor of knowledge but the mind. Nyāya Sūtra 1-16 न आत्मा प्रतिपत्तिः हेतुज्ञं मनसि संभवत्. But then it may be said that there need be no self beyond this combination of mind, intellect and senses. 'It is not so,' says Vātsyāyana; "it is indeed the knower that possesses the instruments of

knowledge and sees with the eye, smells with the nose, touches with the organ of touch and recognises all these experiences with the mind and enables the knower to know these experiences. Hence is the mind called the factor of knowledge". Thus the mind is regarded as the inner organ of knowledge even as it is said in Brahma Sūtra 2-3-40.

"The mind is indicated by both the existence and the non-existence of the condition of knowledge; when it is not in contact with the self, the senses and the sense-objects, there is no knowledge and when it is in contact there is knowledge. One-ness or singleness and atomicity are the two qualities of the mind" (Śārīra I-18-19). The Vaiśeṣika sūtra speaks to the same effect. (V. Sūtra 3-2-9) and so too the Nyāya (Nyaya Sūtra 1. 1 16).

The experiences of happiness, grief, like and dislike etc, are directly perceived by the mind. If these are not perceived by the senses and only by the mind it should not be regarded as conflicting with the Vaiśeṣika sūtra which says that happiness and grief are perceived by the contact of self, senses, mind and the sense-objects. For, the mind perceives them through the senses. The functions of the mind are thought, inquiry and determination. These functions of the mind are described by Caraka thus:

"The functions of the mind are— direction of the senses, control of itself, reasoning and deliberation. Beyond this is the field of the intellect". (Śārīra, I-21).

The Mind is regarded to be of three varieties. Sāttvic. Rājasic and Tāmasic (Śārīra IV-36). Ātreya described mind as being of three kinds. Śuddha or Sāttvic Rājasic and Tāmasic. The Śuddha type is known as faultless, being of the nature of goodness, the Rājasic type is beset with fault being of the nature of passion, and similarly the Tāmasic type is faulty too, being of the nature of delusion; and there are innumerable degrees of each type. But it usually happens that a man's nature is so diverse, that at one moment his inclinations are good, at another passionate and at yet another ignorant and deluded. Can it therefore be concluded that there are many minds functioning

in a man? Ātreya answers in the negative and says, 'Owing to the admixture of all three qualities in each mind of Sattva Rajas and Tamas, the same mind behaves as if it were many, but it is only one. Mind, thus, being unitary, cannot work in various ways and through various senses at one and the same moment. Hence one does not find the functioning of all the senses at one and the same moment'. (Sūtra VIII-5) But, generally speaking, the mind is classed as of one type or the other by the sages according to the preponderant quality of its tendencies. It is thus known by its predominant quality'. (Sūtra VIII-6) It is interesting to note in this connection the various references to the existence and the nature of the mind in the complex apparatus of the inner mechanism of the individual. The Kathopanishad says, "The sense perceptions are higher than the sense organs, the mind is higher than the perceptions, the intellect higher even than the mind and the self is even higher than the intellect."

The categories of the Sāṅkhya school are built up on the same line with Mahat (महत्) or Buddhi derived from original nature (Prakṛti); the ego comes out of it and the mind from the ego. The yoga system takes it wholesale from the Sāṅkhya. Thus there is no point of difference with regard to the subtle mechanism of knowledge in man and the various factors in their order or succession. It is only the Vedāntins that are inclined to regard the subtle organs (antahkaraṇa catuṣṭaya अंतःकरणचतुष्टय) consist of the mind, intellect, ego and the Citta. But what is Citta but the mind itself? Hence the three only remain as the inner organs of knowledge.

These together with the sense-organs form the entire mechanism of knowledge in all four means namely Āptopadeśa, Pratyakṣa, Anumāna and Yukti. These sense organs should be kept in their proper health and tone; to be able to yield valid knowledge and lead man to a good life. The way of maintaining them in proper condition is described in the chapter dealing with the discipline of the senses as declared by the great teacher Ātreya in the Caraka Saṃhitā.

CHAPTER II

REALITY—THE SOUL AND THE WORLD OF THINGS

It is difficult to say that an unequivocal definition of reality or an exposition of the nature of the things of the world has been consistently held throughout the Caraka Saṃhitā which is the main work on Indian medicine. One finds in it snatches of definitions and views expounded in extenso by the Vaiśeṣika, Nyāya, Sāṅkhya and Vedānta systems of philosophy. The reason for this is not far to seek; for medicine, being a practical science, concerned itself with whatever was found applicable to suit its theory and practical concepts. The practical beginning of the Saṃhitā is made with the mention of the Vaiśeṣika categories of Sāmānya (सामान्य) and Viśeṣa (विशेष), the general and the particular interpreted in the therapeutic light. This is prefaced by the mention of synonyms for life which include the phrase "the union of the body, the senses, the mind and the spirit." (Sūtra I. 42). The explanation of the nature of Sāmānya and Viśeṣa as being causative of synthesis and analysis respectively, is followed up immediately by a restatement of the synthesis that Man is the aggregate of mind, spirit and body, and is like a tripod. He is the conscious agent and forms the subject matter of this science. For this benefit has this science been promulgated". (Sūtra I, 46-47)

The totality of things existent has been described when Ātreya declared that "ether etc. (the five proto-elements), self, mind, time and space are the sum total of things.* Things possessed of the senses are sentient or animate and things not possessed of the senses are insentient or inanimate".

It is evident from the manner in which the subject of the Vaiśeṣika categories of reality is dealt with that the theory was already a popular one. A knowledge of the six categories is tacitly taken for granted and statement of the six categories of substance, quality, action, generality, particularity and inherence or coexistence, as

*Vaisesika and Nyaya Sutras—"Substances are nine only: earth, water, light, air, ether, time, directions, self and mind.

preliminary to their further exposition is omitted. On the other hand, Ātreya straightway expounds the nature of these categories in cryptic phrases referring to the lists of qualities etc., described in the much later parts of the treatise. Referring to qualities, it is said, "Heaviness etc., ending with the perceptions", "knowledge etc., ending with effort", superior and other things are regarded as qualities". (Sūtra I-49). "Similarly effort etc., are regarded as action". (ibid). The nature of action or effort is explained in a later section (Vimāna VIII) as the therapeutic endeavour and the therapeutic action of drugs. The qualities of sense-perceptions such as sound, smell etc., are the qualities which are the objects of sense-perception (Śārīra I). According to the Vaiśeṣika physics each quality is special to proto-element such as smell to earth, taste to water, form to fire, touch to air and sound to ether. These qualities may also be found combined in things as the ether is an intermixture of the elements in all things. (Nyāya 3-1).

The qualities in substances such as heaviness, lightness, cold, heat, unctuousness, dryness, denseness, fixity, fluidity, softness, hardness, clearness, viscousness, smoothness, roughness, grossness, subtleness, thickness and thinness are the twenty common ones and these are explained in their medical context fully. The psychic qualities of intelligence or Buddhi consists of memory, feeling, concentration and egohood. The qualities ending with effect are—like, dislike, happiness, grief, effort, feeling and concentration (Śārīra I). The priority etc., are the following namely, priority, non-priority, application regarding number, synthesis, analysis, particularity, measure, preparation and practice (Sūtra XXVI, 29-30).

Action is described in an entirely therapeutic sense. In the Vaiśeṣika view, action is movement of five kinds, upward and downward, expansive and contractive and other indeterminate types of movement. Therapeutically construed a drug's action in any of the five-fold manner described above may be used for purposes of emesis, purgation and such other therapeutic procedures. 'Action' therefore is the therapeutic action of a drug or of the physician. In the chapter defining the therapeutic action, action is defined as the endeavour for achieving a definite result; it is also called action, effort and the initiation of work or treatment. (Vimāna VIII-77).

It is evident that in Caraka, the Vaiśeṣika terms are all applied in therapeutic connotation, the terms of physics applied to pharmacological and physiological consequence. This should serve as a clue to our general understanding of the scope and the purpose of the treatise in its use of logical and metaphysical terms. They are taken from a context of pure thought and applied in a medical and practical situation. This is an attempt at not explaining or elaborating any current system of thought, but culling such facts and definitions as are already current in a manner suited to the purpose of building a framework of a positive science wherein drugs, man, disease and its cure could be harmonised. In so far as it is necessary to define and understand the terms and the factors that enable such a framework, the corresponding terms of various sciences of logic, physics and metaphysics are culled and utilised.

The definition of Samavāya (समावाय), coexistence, provides a striking illustration in this respect. In four masterly verses (Sūtra I, 49-52) the nature of coexistence as well as substance and quality and action is described; "Coexistence is the inseparableness of earth etc., from their qualities. That coexistence is eternal. Wherever the substance exists the coexistent quality is never absent.

"That which is the substratum of action and qualities, and the coexistent cause is substance."

"Quality is the coexistent and inactive cause".

"Action which is the cause of conjunction and disjunction resides in the substance. Action is the performance of what is to be done. It depends on nothing else".

Thus the six categories of substance etc., are explained and this hexad is known as the "cause" of all things or effects in the world. This theory of the nine substances comprising the things of the world is common to Vaiśeṣika and has been appropriated by the medical teachers thus far. The world is full of effects, in the forms of drugs, persons and things of these eternal original substances. The five proto-elements are atomic in structure and the atoms are possessed of the quality and action in the relation of generality.

particularity and coexistence. Thus far it is a plurality of ultimate things. The world stands by combination. The products of such combination are more than the mere aggregate of parts of which they are produced.

The Sāṅkhya which includes these among its categories, refers them to an original cause of which they are evolutes. The categories that are twenty-five are thus ultimately reduced to two—the self and original nature or Prakṛti known variously as Avyakta and Pradhāna. In Caraka there is a sudden transition from the pluralism of the Nyāya-Vaiśeṣika to the Sāṅkhya categories, again making a fundamental deviation from it betraying Vedāntic inclination towards one common origin of all things. We shall note this tendency and transition presently.

CHAPTER III

WHAT IS MAN?

We come to the problem of man, the most significant among these 'effects' known as the world. We must understand what man is for he is the subject matter of the science of medicine for whose sake it is promulgated (Sūtra I-47). To understand him is to understand the world, for he is similar to the world in his construction (Śārīra V. 3). He is the microcosm, the macrocosm in miniature.

In Caraka, one and the same thing, or a set of things, is defined and enumerated in various ways and from different standpoints. Similarly this world of six categories can also be defined as a world of six elements—the five proto-elements of earth, water, fire, air and ether and the sixth one the conscious element. Man being a conscious individual is identical with the conscious element itself. Man, again, being an effect of these six is also the aggregate of these six elements (Śārīra I. 16.) Looked at once again from the stand-point of a further elaboration of these principles, man is the aggregate of twenty-four elements (Śārīra I-17) consisting of the mind, the ten organs of sense and action, the sense objects (five elements)

and the eightfold Prakṛti or subtle constituents of his inner beings viz., the Ātmā (spirit), the Buddhi (intellect), the Ahankāra (the ego) and the five subtle elements. Thus he is called the aggregate of twenty-four constituents. This aggregate-individual is to be treated for disease, for ignorance and for spiritual bondage. Liberation from disease, ignorance and birth and death is the subject of this science. It is all-round and thorough in its treatment of man, not stopping till it has achieved his final emancipation from all suffering

Let us now see what these various constituents are that make up his being and what causes have brought them into being. What is his origin? If he has any, when and how his liberation can take place? These significant questions, exhaustive in their scope and nature addressed by his disciple to Ātreya are thus:

"Into how many categories is man divided in view of the diversity of the elements (that compose him)? Wherefore is he said to be the cause? What is his origin? Is he ignorant or endowed with knowledge? Is he shown to be eternal or non-eternal? What is Prakṛti (the primal matter)? What are the modifications? What is the mark of Puruṣa (the man)? The knowers of the self declare the spirit to be non-active, free, endowed with lordship all-pervading, infinite, the knower of the field and the witness likewise. O, worshipful one! If the spirit is thus non-active, how, then, is activity predicated of him? And if it is free, how is it that it is born of undesirable wombs? If it is endowed with lordship, wherefore is it drawn perforce into suffering? And if it be all-pervading, why does it not experience the totality of sensations at once? And wherefore does the infinite one not perceive what is hidden behind a hill or a wall? There is also the doubt as to which is prior, the knower of the field or the field itself?"

In reply to this formidable list of questions Ātreya propounds a philosophy in which are found the echoes of intermingled voices of the Sāṅkhya and the Vedānta. After describing elaborately the nature and functions of the mind and the senses, there is a reaffirmation of man as the aggregate of twenty-four elements. "The supreme (spirit) combined with Buddhi, the ten organs of sense and of action, the mind and the five sense-objects is the aggregate of the twenty-four categories known as Man. The Buddhi here stands for the seven-fold Prakṛti of man

excepting the supreme the intellect, the ego and the five elements. This supreme is described again as the unmanifest (avyakta).

It is in connection with the function of the mind that Abhāva (अभाव) or non-existence is mentioned as one of the objects of knowledge. Though it is not included among the six categories of substance etc. it is stated that the mind can recognise non-existence as in the case of the absence of contact with the sense of touch.

“All these characteristics are perceived by the tactile sense; for the tangible together with its opposite is apprehended by the sense of touch”. (Sūtra I-3).

Even in the Kaṇāda-sūtra, though non-existence is not included among the categories, it is introduced later on in the course of exposition. While in the Nyāya the categories are explicitly stated to be seven viz., those of the Vaiśeṣika and the seventh non-existence, at the very beginning. (Nyāya-sūtra I-2.)

But why this aggregation of elements? Who or what has brought them together to form this man? Rajas and Tamas i.e. the qualities of passion and ignorance are responsible for this endless aggregation. Only by their elimination and by the increase of the Sāttvic quality of knowledge and goodness will this aggregate be dissolved. Consciousness or knowledge is affirmed as the inalienable quality of the Ātmā or the self. But to what do these three qualities pertain? In the Sāṅkhya view, these are the triple nature of Prakṛti known as Avyakta or Pradhāna. But here in Caraka, as it will be later discovered, the Ātmā itself is known as the Avyakta. To whom then do these qualities belong and how does the Ātmā suffer from these qualities is a question to which we find no answer in Caraka. As we have already found, minds are said to be of these three types judging from their preponderant tendencies. A quality is that which is in coexistent relation to the substance and cannot be changed or separated. In which case it would be vain to suggest that by controlling the characteristics of Rajas and Tamas one could increase the Sattva quality in order to gain liberation. It is evident that the Ātmā does not possess these qualities, for in the liberated state it is not under the influence of these.

Both in the exposition of Anumāna by means of its illustration, in judging the fruit from the seed as well as the description of the fetal conception and development where it is said that out of the seed of man only the human form comes out just as animals from animals. There is an obvious faith in Satkārya-vāda concept of the Sāṅkhya. Hence, to view the evolution of the later categories from Avyakta and to identify it with Ātmā, the self, beyond the three qualities of Sattva, Rajas and Tamas, the self that is said to be free from undergoing change or modification, is a glaring inconsistency.

The exposition of the metaphysics of man begins with the assertion that this aggregate being is the foundation of action fruit of action, knowledge, delusion, happiness and grief, and life and death. He who thus understands the truth knows the beginning and the end, the succession of his incarnations and the remedy for this mortal ailment. At this stage the teacher is confronted with the Buddhistic doctrine of the momentariness of knowledge and the transient succession of a series of individuals and he feels compelled to refute it and establish the permanence of the individual soul who passes from the past through the present into the future, thus retaining his individual identity through time. For in the absence of such an identical individual through all the varied experiences, the fruit of one's actions will have to be felt by another and there would be no meaning in bondage or release, grief or happiness. In the words of Ātreya "In the absence of a continued doing and knowing individual, there would be neither light nor darkness, neither truth nor falsehood, no Vedas, and good and bad actions would cease to be. There would be no substratum of experience, no happiness, no grief, no exit and no entry, no speech, no science, no scriptures, neither birth nor death, and neither bondage nor release. Therefore it is that the knowers of the cause declare the self of the individual to be the cause. If the causative self were not there, light etc., would be meaningless and without purpose. Without the self there would be no knowledge of light etc., produced and without the experiencing self these would be purposeless. (Śāṅkhya I. 39-42.)

Only he can say that the body is made of transient materials

gathered together and contains nothing higher, who asserts that the pot is made by the potter's wheel and the turning stick and without the potter, or that the house is brought into being by the earth, straw and wood alone without the aid of the mason.

It is therefore out of ignorance that a man who is bereft of reason and the authority of revelation, regards life as devoid of an author and doer. (Śārīra I. 43-44).

If life be but a succession of similar individuals who are every moment new and are regarded as the same owing to their similarity and that they are momentary groups of elements possessing no self and there is no doer of action nor reaper of their results, it leads you into the fallacy of one enjoying the results of another's doings. " The instruments of the doer are many and varied but the agent is always the same. The agent with his instruments is the cause of all activity". (Śārīra I-49). The physical body is being consumed every moment, quicker than the winking of an eye, and those elements do not return. And the result of an action cannot affect any other than its author. Hence it is the view of the knowers of truth that there is an everlasting element known as the self which is the cause of actions and the enjoyment of the results of actions in all individuals. (Śārīra I. 50-51).

Having thus established the existence of the eternal self, it remains to be known what its nature is and how it functions and expresses itself in this aggregate-being, called man. The Ātmā is the principle of knowledge. It is known as the knower. That is the one inseparable characteristic of the self which manifests itself only if the rest of the constituents of the aggregate-being fulfil their peculiar functions. If those other constituents which are the means through which the knowing self expresses itself are not in proper condition or fitness, to that degree is its knowledge obscured.

The self is the knower. Its knowledge proceeds from its contact with the instruments of knowledge viz., the senses, mind and the understanding. But in absence of the contact of the organs or in case they are defective, there is no cognition. (Śārīra I-45).

Just as one cannot perceive one's reflection in a dust-covered

mirror or in the muddy water, similarly is the self's nature not manifested through the impaired senses. (Śārīra I. 55).

The self does not initiate action by itself nor does it suffer the fruit of action. All action and enjoyment of action results from this aggregation of the constituents and there is nothing in the absence of such aggregation. (Śārīra I. 57). Action, consciousness and discrimination emanate from and are the products of the aggregation of the senses, mind, intellect and the organs of action. The manifested being, known also as the aggregate-being, is never a single constituent, nor does it exist without associate causes, nor does it escape dissolution resulting from its speedy career and its inherent nature. The self is beginningless and endless but the one brought about by such associate causes is otherwise. The self which is never caused is eternal but the being that is brought about by causes is the contrary of it, that is non-eternal. (Śārīra I. 50,) Hence it is clear that the aggregate being known as man who is the subject of our study, is brought into being by an association of factors and must necessarily suffer dissolution, while the self by virtue of its being not a result of a cause, is eternal. Ātreya propounds the theory of being at the very outset of his thesis saying that things are brought into being by causes but require no cause for their dissolution (Sūtra. XVI-28). Disintegration or dissolution is the very essence of their nature and need no other aids or factors. Hence man that is brought into being by an aggregation must necessarily dissolve and vanish without the aid of an extraneous cause. Dissolution is of the very essence of his being. Let us therefore see and analyse this aggregate being which is bound to dissolve and differentiate the self that is causeless and eternal from that part of him which results from a cause and is non-eternal.

This is an interesting classification current in the Upaniṣads, the Gītā and the Sāṅkhya concepts of life and is found in a slightly modified form in the Caraka saṃhitā. The aggregate-man is divided into two parts, the knower and the known. The known is also called the field (क्षेत्र Kṣetra) in Upaniṣads as well as in later literature. The self which is the knowing principle surveys the field before it. All being results from this coming together of the field and the knower of it.

The Gītā says ' whatever is brought into being mobile or immobile, should be known to be produced by the combination of the field and the knower of the field'. (Gītā 13-25).

The supreme self is referred to as the creator of the world, the knower of everything, the self source, the knower, the essence of time, possessor of attribute, the all-knower, the lord of Pradhāna. i. e. (Prakṛti or the source of nature) and of the knower of field, the lord of the Guṇas (namely Sattva, Rajas and Tamas which constitute Prakṛti) and the cause of the world, of existence, bondage and liberation. In the Gītā, Kṛṣṇa declared, ' This body is called the field and he who knows it is called the knower of the field by the wise. Know me also to be the knower in all the fields and knowledge concerning me is the knowledge of both the field and its knower.' (Gītā 13-2).

The field along with its modifications consists of the five proto-elements, the ego, the intellect and the unmanifest, the eleven organs of sense and action (including the mind) and the five sense objects as well as like and dislike, happiness and grief, the comprehensive understanding, consciousness and concentration. (Gītā. 13, 5-6).

In Caraka there is at first a definition of the two categories of the unmanifest and the manifest. That which is unknowable and unrecognisable by the characteristics of being is the unmanifest, while the manifest is of the opposite nature. The self is unmanifest, knower of the field, permanent, all-pervasive and indestructible. That which is different from this is the manifest. Here again is another way of stating the two categories. The manifest is the object of sense perception when the senses are in contact with them. The unmanifest is different beyond the senses and is recognised by its signs and characteristics. (Śārīra I, 60-62).

The five proto-elements of ether etc., the intellect, the unmanifest and the ego which is the eighth are known as the Bhūta-prakṛti the cause of being as well as the sixteen evolutes. These latter are the five organs of knowledge and the five organs of action, the mind

and the five sense-objects. Thus among the aforesaid, all except the unmanifest is known by the wise as the knower of this field. (Śārīra I. 63-65).

The unmanifest is the self, the knower and is the Cetanā-Dhātu (चेतनाधातु) i.e., the element of consciousness in the universe. Throughout, so far, it has been propounded that the sense-organs, the mind, the ego and the intellect are insentient and are regarded as sentient only when in conjunction with the self who illuminates them with consciousness. "The mind is insentient and is regarded as acting only when in conjunction with that other principle of consciousness which imparts the sentiency to it. Hence it is the self that is possessed of consciousness and is called the doer. Since the mind is insentient it is not regarded as doer." (Śārīra. I. 75-76).

The field therefore derives its sentiency and character as a doer by its being charged with consciousness flowing from the self. Its every action, thought and word is derived from the self. These actions should therefore belong to the self and should be known as its attributes when in conjunction with the field. Ātreya declares "The two vital breaths of Prāṇa and Apāna, the winking of the eye, living, the movements of the mind, such as fancy, perception of the sense-organs, impelling, meditation, going to distant lands in dream, the understanding of death, recognition with the left eye of what the right eye has seen, likes and dislikes, happiness and grief, effort, feeling, concentration, intellection, memory, and egohood are the characteristics or signs of the supreme self". "These signs therefore are found in a living man, declare the great sages, and in the dead these characteristics of the self are not seen'. For the body is like an empty house when the self has deserted it. As only the five proto-elements are left in it, the man is said to have been 'reduced to five', (पञ्चतत्त्व एतत्) which is the synonym for death. (Śārīra I. 70-74).

This self is the sixth element of the universe, the element of consciousness. This is called the unmanifest, the knower of the field which is the body and the self as well as the supreme self. This self is regarded as the author of the world, the knower, the witness and the cause. (Śārīra. III-25).

The question naturally is whether the self is a knower even in the absence of the field, when it is not in conjunction with the mind, senses etc. Just as the body is insentient without the self, similarly the self might be deprived of knowledge without the aid of the body, mind etc. But Ātreya answers emphatically in the negative and says, "The self is knower not only when given the senses, but also when the senses are absent, for he is never without the conscious quality at any time. There is knowledge manifested only if it is already there. The lack of the senses cannot remove the knower's power of knowing. The particular perceptions of things only are not there but the capacity to perceive is always there, just as the knowledge of jar-making is in the potter but does not find its expression in the absence of earth etc. (Śārīra III, 18-19½).

Even when the self is bereft of the sense-perceptions, speech and action in the sleeping state, yet in dreams he has knowledge of happiness and grief. He is therefore known as never being without knowledge. He is ever the knower. Without the quality of knowledge in the self no other type of knowledge can ever manifest itself. Therefore all knowledge in life cannot come by itself, or uncaused by the knowledge belonging to the self. (Śārīra. III, 23-24.)

The element of consciousness known as the self is regarded variously as the cause, region, the instrument, the imperishable, the agent, the thinking one, the knower, the understanding one, the seer, the dispenser, the great one, the architect of the world, the omniform, the supreme person, the creative source, the unchanging, the eternal, the substratum of qualities, the seizer, the chief, the unmanifest, the individual soul, the knower, the ego, the conscious one, the infinite, the soul of creatures, the soul of the senses, and the inner soul. (Śārīra IV-8).

We have thus seen that this self is identified with the source of all things, the creator of the universe and the supreme self pervading everywhere. Brahma is among its synonyms. This is both the human self as well as the universal self and there is nothing beyond this. This is in accordance with the description of the Puruṣa of the Vedas and the Brahma or Ātmā of the Upaniṣads which is the source

and the end and essence of all things. Out of it evolve the universe, the ether, air, water, fire and earth and all living beings. The great Mahāvākyas such as सर्वं खल्विदं ब्रह्म.... 'all this is Brahma' proclaim the same concept of all things being of the essence of supreme. This is the key-note of the pantheistic view of life that has a significant place in the Upaniṣads. But how and when this self was caught up in the aggregate man and what the origin of the aggregate itself is, have yet to be explained. How has this aggregate being come about and what is the purpose and the end of it. Life must have a direction and fulfilment. This aggregate being is subject to disease and death. But death does not dissolve it as the self according to Ātreya goes out into new lives and makes its entry into fresh wombs carrying with it the subtle elements that evidently form its vehicle.

We shall therefore have to search for the causes for his origin before we think of the origin and unfoldment of the universe itself.

The supreme self being beginningless has no origin; but the aggregate-being is born of acts, delusion, desire and aversion. (Śārīra I, 53.) This only explains the causes that lead to the formation of aggregate-being but when and why it took place first cannot be answered for it is said by Ātreya, "there is no beginning for the self and the succession of the fields is also beginningless. Hence, since both are beginningless, neither can be antecedent to the other" (Śārīra I-82). We are indeed on the horns of dilemma. The self is beginningless and so is the succession of bodies known as the field and yet the elements of this aggregate-being are all evolved from the self. The causes for the formation of this aggregate are known, but when they first came into operation is not to be asked, for this process of aggregation has gone on from beginningless time.

The evolution of man is thus: From the unmanifest is born the Buddhi, the principle of intelligence, and from the intellect the ego-sense is derived; from the ego the ether and other proto-elements are born in their successive order. Then the whole man possessed of all the faculties springs into view and is said to be born, and at the end of an age when the world dissolves, this being merges back into those constituent proto-elements in the reverse order (Śārīra I, 66-67).

Thus it emerges into the manifest from the unmanifest and gets back again into the unmanifest from the manifest. Passion and delusion having taken possession of him, man revolves from birth to death like a wheel. (Śārirā VIII-68).

In his account of evolution of the individual and his involution Caraka is in perfect accordance with the Sāṅkhya view except for the identification of the unmanifest with the supreme self. According to the Sāṅkhya view, the unmanifest is the Pradhāna, the original form of nature out of which all other forms are evolved. The self is of a separate category altogether and undergoes no change or modification. It is just a perceiver, knower and witness. The Buddhi and other evolutes are non-conscious and have Prakṛti, known also as Avyakta, as their source. It is the nature of Prakṛti to undergo change and give birth to things. It is called Prasavadharminī i.e. that gives birth to other forms whereas the soul known as Puruṣa is the principle of consciousness and is eternally the same and is the witness and enjoyer. Nothing is derived from him nor gets back into him; he is eternally the same and unchanging (Aprasavadharmi).

Ātreya calls the self Nirvikāra', the changeless, even as it is spoken of in the Upaniṣads as a changeless principle and also as the source of the universe. (Śaṅkara in his commentary on the Brahma-Sūtra points out that the Vedānta has held "Avyakta" to mean Self. B. Sūtra 3-2-23). And despite the whole context built up in the Caraka Saṃhitā in keeping with the Sāṅkhya doctrine of evolution, this final declaration, anomalous though in its nature, definitely represents the Upaniṣadic tendency to derive all things from one supreme Self (Ātmā).

Cakrapāṇi, the commentator of Caraka, has taken throughout the Sāṅkhya view for granted, and has interpreted Avyakta as the unmanifest primary form of Nature. If it is also called the self and the creator etc., it is according to him, due to the close contiguity in nature and position between the two viz., the self and the primal nature. They both come under the category of the unmanifest and the primal nature Pradhāna is for all practical purposes the self, as it closely resembles the self by its immediate proximity to it and its subtle

nature. There is a certain amount of ambiguity in Caraka's exposition of the subject including the description of the final liberation of the individual. One does not find the mention of the positive ecstasy that characterises the "Brahma" state in the Upaniṣads. It is purely negative in its content. Nevertheless, the 'Avyakta' is the self which attains the Brahma-state and which is the origin and the end of all beings.

According to Dasguptā (History of Indian philosophy Vol. I) this is an old form of Sāṅkhya propounded by Pañcaśikha, the disciple of Āsuri while the Īśwarakṛṣṇa system of Sāṅkhya is the one propounded by Āsuri, Kapila's direct disciple. The Mahābhārata mentions both these varieties of Sāṅkhya i e., of the twenty-four as well as the twenty-five categories and condemns them as unworthy of acceptance. The third variety of the twenty-six categories, the twenty-sixth being god is recommended as the one worthy of acceptance.

Śrī Dargāśaṅkara Śāstrī writing in Gujarati and Jyotiścandra Saraswatī writing in Sanskrit are both of the opinion that the nature of the Ātmā as expounded in Caraka indentifying it with the unmanifest 'Avyakta' is undoubtedly Upaniṣadic in its significance. It is also of interest to note the absolute similarity in terms as well as in outline between the metaphysical expositions found in Yājñavalkya Samhitā and in Caraka. They are almost replicas of each other. It is for the historian of religion and philosophy to refer to either as the source of the other or to an altogether different common source from which they both might have drawn.

The next question now is, why is it that the self being Universal and all-pervading does not yet experience the feelings and sensations of all the bodies, but knows only the sensations of and through the sense-organs of one body only. In answer to this question, Ātreya asserts that the self is all-pervading, but owing to the finite nature of the mind, a limitation of experience is imposed on it. When the mind is stilled and brought to quiescence, the self perceives all things beyond its usual ken. (Śārīra. I. 80-81),

This is in accordance with the view of Patañjali who expounds

in his yoga philosophy that this quiescence of mind, known as Samādhi, enables the self to attain extra-ordinary powers of perception and action, though these attainments are to be disregarded in the interests of final liberation. This Samādhi is the last of the eight steps of yoga. By constant practice of this, the self attains its liberation from mind and matter. There are eight supernatural powers attained incidentally from this practice of Samādhi.

They are the eight Siddhis known as (अष्टसिद्धि): contraction to atomic size, expansion, becoming light, seeing distant objects, extraordinary powers such as even touching the moon, attainment of all desires, control over the elements and lordship. (Yoga sūtra III-45).

The power attained by Siddhi are slightly modified in Caraka. They are eight viz., gaining entrance into other bodies, telepathy, the doing of things according to one's own will, clairvoyance, clairaudience, omniscience, effulgence and vanishing from sight at will. The Śwetāśwatara Upaniṣad has a similar list of the powers attained by the practitioner of Yoga. (Śwetāśwatara Upaniṣad Chap. II. 12-13).

"The person engaged in Yoga suffers neither disease nor old age nor death, his body being filled with the fire of yoga. He attains lightness, good health, stability, lustre, strength of voice, bodily fragrance and scantiness of excretions. These are regarded as the first effects of Yoga-practice".

The real purpose and end of yoga is the attainment of this absolute quiescence. This Samādhi if it becomes everlasting is liberation. Ātreya declares that in both states of yoga meaning thereby in Samādhi as well as in final liberation there is a cessation of all experience. In liberation there is no residue of it left even to drag one back to life. This yoga or Samādhi leads to liberation.

Before we come to know the nature of that final stage of liberation which is the supreme consummation of man, the aggregate-being, we shall understand the great analogy that subsists between this aggregate-man and the universe in which he dwells i. e., the analogy between the microcosm and the macrocosm.

Punarvasu Ātreya declares in significant words that this man resembles the universe. Whatever principles are in the universe are also in him. The universe consists of innumerable constituent parts and even so is man. "We have said generally that earth, water, light, air, ether and Brahma known as Avyakta are the six elements constituting man. The earth is represented in man by hardness, water by moisture, fire by heat, air by the vital breath, the ether by the interstices and the self by the indwelling spirit. Similar to the office of God in the world is the might of the individual soul in man. God's greatness in the universe is seen as creator; in the body the soul's greatness is seen as the mind. What Indra is in the universe the ego is in man; the Sun corresponds to the power of absorbing, Rudra to anger, the Moon to beneficence, the Vasus to pleasures, the two Aświns to lustre, the Maruts (winds) to enthusiasm, the Viśvedevāḥ (universal Gods) to the sense-organs and the sense-objects, darkness to delusion, light to knowledge; just as there is the act of creation in the universe, so also in man there is fertilization or the act of impregnation; corresponding to Kṛtayuga is the period of childhood; corresponding to Tretā is youth; corresponding to Dwāpara is old age; corresponding to Kali is infirmity and corresponding to the end of a world-cycle is death in man. In this manner by pursuing this analogy, O Agniveśa! you are to understand the unity of all those different members in the world and in man which we have left unmentioned here." And we may conclude that as the created elements return to their original essence in that hour of universal dissolution, so in his hour of final dissolution he returns to the original essence of the self and remains for ever in the Brāhmic state known as liberation.

That liberation is a state from which there is no fall back into life. It is said that owing to the non-existence of the forces of Rajas and Tamas and the complete wearing away of all fruits of action, there is elimination of all the factors of aggregation. Hence it is called the state of non-return. (Śārīra I. 142).

This state results from the continuous practice of certain factors known as virtues, discipline or regimen of conduct and thought. This discipline as described in Caraka has close resemblance to the

discipline of the Buddhistic and Sāṅkhya views wherein the elimination of the evils or hindrances in the path to liberation alone are mentioned. In the yoga-system to some extent, and in the Vedānta emphatically, the positive dedication of the mind to goodness and love and adoration of or meditations on the nature of the Supreme or the glory of God and of the identity of the Self with the Supreme, are the means of liberation.

"From the accession of the pure understanding, all these proceed: the right seeking of the company of the good, the total avoidance of the wicked, continence and abstinence and various austerities, the study of the sacred scriptures, meditation, love of solitude, aversion to sense-pleasures, perseverance in the path of liberation, supreme determination the non-beginning of actions and the complete annihilation of those already done, the desire to quit the world, humility, dreading of attachment, the fixing of the mind and understanding in the self and the investigation of the true nature of things—all this proceeds from the recollection of the true nature of the Self". (Śārīra I, 143-146).

But if it be asked as to how this recollection of truth comes about, it is answered that the practices 'beginning with the company of the good and ending with supreme determination,' give birth to the recollection of one's true nature. And recollecting the self's nature one is released from suffering. (Śārīra I-147).

"There are eight causes that lead to this recollection. They are the recognition of the nature of the cause of life, similarity and dissimilarity, concentration of mind, repeated practice, intellectual inquiry, repeated hearing and constant recollection of what has been heard and experienced. By these means arises that recollection, leading to liberation. This path to liberation which had been seen by the liberated yogis and knowers of knowledge (Sāṅkhyas) and by which they have reached that state from which they have not returned, is regarded as the only path. (Śārīra I, 150-151). This state from which there is no return is known as the Brahma state. The individual becomes free and installed in his original status. He is called "Brahmabhūta" (ब्रह्मभूत) "one that has become Brahma." He is there bereft

of special characteristics that once earmarked his individuality and cannot be any longer recognised by any sign. He is lost in the Infinite.

In Ātreya's own words, "In that final renunciation, all sensation together with their root-cause as also cogitation, contemplation and resolution come to an absolute termination. Thereafter, the individual self having become one with the universal self is no longer seen as particularised being rid of all qualities. He has no longer any distinguishing mark. The knowers of Brahma alone have knowledge of this. The ignorant cannot understand it. (Śārīra. I, 154-155).

CHAPTER IV

THE ETHICAL NOTE IN AYURVEDA

It is remarkable that despite the wide divergencies in their conclusions regarding the nature of reality, the religions of the world are unanimous in their sense of the ethical values of life. Elimination of envy, hatred, covetousness and wickedness and the practice of goodness, love and self-sacrifice are universally acclaimed as the right way of life. These lead to the control of the senses and mind and imply the necessary discipline and inner purity. The various and principally the six systems of Indian philosophy as also the Buddhistic and Jain systems of thought are united in their upholding of righteous conduct and mental and emotional purity as the means to liberation whatever be the nature of that liberation. A theistic belief is not essential to the upholding of such a high ethical ideal of life. Buddhism, as well as Sāṅkhyaism and the Mīmāṃsā doctrines are avowedly ethical in their ideal and uphold rigorous discipline of the mind and the heart in the interests of the supreme fulfilment of life. It is quite evident from the ethical history of man that there is an inner compulsion that extorts his instinctive allegiance to what is right, good, and virtuous. Despite man's inability to believe in a creator God, he accepts the mystical efficiency and fruit-bearing power of the good and evil ways of life. The faith in the invisible

power of action, known as 'Karma', is the product of the same instinct and here in Caraka, we find ample witness to that early faith of man in the efficiency of good and evil actions.

The Vaiśeṣika doctrine with the expounding of which the Caraka Saṃhitā virtually begins, is concerned primarily with teaching righteous living. The Sūtras of Kaṇāda begin with the aphorism "we shall now expound the nature of virtue". The origin of Ayurveda curiously is also for the preservation of human lives that they may be dedicated without hindrance to austerity, meditation and discipline of mind. It is the feeling of love and compassion for suffering humanity that first gave rise to the sages' efforts to discover the science of medicine. (Caraka Sūtra VI, 7).

Notwithstanding the absolute nature of the inner compulsion for goodness and duty, the generality of mankind is impelled only by the fear of evil effects and the hope of happiness resulting from vice and virtue respectively. This is the hypothesis or the concept of Karma, the inquiry of whose teleology is futile. It must therefore be regarded as beginningless though it is given to man to put an end to it. The diversity of the initial circumstances and equipment with which men are brought into this life is accountable only in terms of the diversity of the causal actions and tendencies of their previous lives. This total causal force by whose residual energy a person is catapulted into this life is known as destiny (Vidhi or Daiva). In Caraka it is called Daiva and the fresh initiation of action in the present life 'Puruṣakāra'. This doctrine of previous incarnations implied by Karma is made out effectively according to Caraka by all the four methods of ascertainment viz., scriptural testimony, direct perception, inference and common sense. The great sages possessed of infallible vision, by virtue of their meritorious life, have declared the existence of rebirth unequivocally. (Sūtra XI. 28-29). From direct perception we find the following: 'the children are unlike their parents. Those born of the same conditions are possessed of different traits of color, voice, shape, mind and intellect. People are born of higher and lower castes. Some are born slaves and some overlords; they are endowed with varying degrees of happiness, grief and life-span. New born babies without any acquaintance before, seek for the mother's breast, weep and cry and show fear. This

would not be possible in the absence of memory coming from previous births. The children are born with various marks on their bodies. They show a variety in their skill and tendencies, and sometimes possess a memory of previous birth. Cakrapāṇi, the commentator on Caraka, in his note on the phrase, suggests that it may also mean that some men return to their bodies after death being sent back by the messengers of Yama who had taken them as a result of mistaken identity'. (Sūtra XI, 30). The above are agreed facts of direct evidence in life and justify the faith in a previous incarnation which explains these varied phenomena.

Taking now to the method of inference, it must be known that the actions of a previous birth must be fully experienced to put an end to them. And in every life fresh action is also undertaken. Hence there is a continual residue of action whose fruits are yet to be reaped. This is known as 'Daiva' the unseen factor that ushers in life in the present birth. One has to infer the nature of the seed from the fruit as the fruit is always true to the nature of the seed. Common sense speaks to the same effect. It is only the action that has already been accomplished that bears fruit. Fruit cannot come out of nothing. The fruit of action is similar in nature to the causal action, for we see that a particular fruit and not a different fruit comes out of a particular seed. (Sūtra XI, 31-32).

This leads us on to the further problems of the predestination of the nature of this life. As a supreme example of this, Ātreya discusses the problem of the span of life of a man. If this life and all its happiness be totally the result of action in the previous birth, his life span must be already determined and neither spiritual or physical healing will avail anything. In such a case the science of healing is utterly useless and has no place in a world where a life can be neither prolonged by medicine nor shortened by disease. It is useless to talk of either saving or killing a man but Ātreya has a way out of this morass of predestination. He describes three kinds of action, the powerful, the moderate and the weak actions. (Vimāna III 31).

This life is not wholly in the grip of the past for there is scope for fresh initiation of new action which is known as Puruṣakāra.

This latter too is of three kinds—powerful, moderate and weak. If past action be moderate or weak, it can be overcome by powerful fresh action in this life. If the present action be moderate or weak, only the powerful action of the past will assert itself and have its full effect. It is therefore possible by powerful action in the present to neutralise and overcome the result of moderate or mild past action. Hence man must pursue the righteous life intensely. He can be his own architect by action in the present life. This is a great and hope-inspiring positive provision that Ātreya holds up for mankind without which there would be no justification for any good and reformist effort in life, and particularly for a reformatory and curative science like medicine. This is a very significant contribution to metaphysical thought that Ātreya has made while discussing the ways and possibility of averting the results of past action. He says that 'Daiva' gets nullified by stronger 'Puruṣakāra' and similarly the stronger 'Daiva' overpowers the 'Puruṣakāra'. (Vimāna III, 33-34). This mutual counteracting is inevitable but sometimes does not occur according to the relative strength of the two kinds of action and also due to the time factor. But it is wrong to take either of them to hold the field exclusively. (Vimāna III, 34-35).

With this background in view we shall find the necessity for an intense, almost frantic pursuit of the good life. The Smṛtis say that man must pursue righteousness as if death had caught him already by his forelock. गृहीत इव केचेतु मृत्युना धर्ममाचरेत् ॥ च. सू. १७, ११३

In Caraka, all mental and spiritual evils like the bodily ailments are regarded as diseased conditions due to volitional transgression (अज्ञापराध). That is as it should be. Modern philosophers regard 'crime and wickedness as pathological conditions and that punishment is to be accorded from a reformatory and therapeutic point of view. Ātreya's view has all the freshness, humanity and scientific nature of the modern outlook on moral evil.

Rajas and Tamas are the ill-humors of the mind even as Vāta, Pitta and Kapha are of the body. Self-restraint, moderation, dedication to the study of scriptures and meditation are described

as constituting the psychic or divine therapy. This divine therapy is described in great elaboration and is called 'Sadvyṛtta' (Sūtra I-58).

Ātreya declares that all action results from the operation of speech, mind and body. That is of three kinds: excessive operation, non-operation and wrong operation. This is based on the threefold divisions of sense-contact with the external objects which are excessive contact, non-contact and wrong contact, all of which constitute the factors of disease. Complete suspense of action of speech, mind and body is non-operation. Excessive exercise of them is over-action. Forced suppression or forced excitation of the natural urges, awkward stumbling, falling and posturing of limbs, abusing the body, injuring the body, violent kneading of the limbs and forced holding of the breath and other kinds of self-mortification are misuse of the body. Misuse with reference to speech is indulgence in language that is insinuating, untrue, untimely, quarrelsome, unpleasant, incoherent, unhealthful, harsh etc. The misuse with reference to the mind consists of giving way to fear, grief, anger, greed, infatuation, self-conceit, envy, deluded thinking etc.

These should be corrected and the way of correcting the defects of the body and mind constitute medicine in general. But those of the mind require the practice of a regimen of conduct, made up of mental and emotional discipline. This is otherwise known as the good life (Sadvyṛtta) or 'Dharma', or righteous behaviour. The inclination for righteousness must be continually kept up by effort for there is a natural decline of that tendency in men from age to age. Ātreya says elsewhere, "In every succeeding age there is a fourth part of righteousness dwindling down, and similarly the qualities of things in the world and the life-span of people too go down at the rate of one year for every hundredth part of the age". (Vimāna III, 24-25). Man must therefore be ever vigilant in countering this tendency and pursue the good life with all his strength, with all his mind and with all his soul. Ātreya described the good life as constituting the factors for happiness and long-life in this world and also for liberation of the spirit. (Sūtra VIII 18).

Thus the good life is not only that which gives spiritual fulfilment and final liberation but also one which is fraught with good

in this life avoiding the ill-temper of the mind which may even culminate in psychic diseases such as insanity, epilepsy and other diseases and make the body susceptible to somatic disease also. The good life therefore from the points of view of happiness in this life as well as in the next, and final liberation, must be assiduously practised, for Āyurveda is the science in which the well being in both the worlds is established, as well as the means of final liberation of man, the aggregate being.

हिताहितं सुखं दुःखमायुस्तस्य हिताहितम् ।

मानं च तच्च यत्रोक्तमायुर्वेदः स उच्यते ॥

च. सू. १, ४१

“ That is named the Science of Life wherein are laid down the good and the bad life, the happy and the unhappy life, and what is wholesome and what unwholesome in relation to life, as also the measure of life.”



च र की य द र्श न वि म र्श : ।

इं हो विदितवेदितव्यानामधिगताधिगन्तव्यानामनुष्ठितानुष्ठेयानां गुणदोषविवेचने धितच्छब्दे दानामिव नीरक्षीरविवेचनेऽधिकारवतां तत्रभवतां आयुकानामतिरोहितं यदायुर्वेदः स्वयमात्मानमुपवेदता-
मुपनिनीषुर्वैदिकतत्त्वदर्शनाधारभूता दृढतरविज्ञानशिला उपष्टम्भगच्छिदोष-त्रिधातु-सिंहासनमधिरोहतीति, न
सर्वासूपलभ्यमानास्वायुर्वेदसंहितासु दार्शनिकमौलविद्वान्तोपलम्भो वरीवर्ति, केवलं चरकमुत्तुतयोः प्रसङ्गसङ्गता
वाग्व्याहारा दार्शनिकविचारगुम्फिताः सूचका वाऽऽप्राप्यन्ते किन्तु नात्र निरपेक्षसूक्ष्मेक्षिकयेक्षिते किमपि
स्वतन्त्रमायुर्वेददर्शनमस्तीत्युपपादयितुं प्रभूयते ।

कृतप्रयत्नैरप्यस्माभिरासाद्यमानैश्वास्तिकनास्तिकदर्शनेषु वर्तमानायुर्वेदसंहितोपनिबद्धं दर्शनमविकलं
यथातथं न दृग्गोचरीक्रियते । ऋते च तत्त्वसंभ्रहकृच्छान्तिरक्षितकमलसीलाभ्यां न केनापि कुत्राप्यायुर्वेद-
दर्शनं पूर्वपक्षेऽपि निक्षिप्तं येन पुरा किल किमप्यायुर्वेददर्शनं बभूवेत्यप्यनुमीयेत । चरकचतुराननश्चक्रपाणिरपि
“सर्वपारिषदमिदं शास्त्रं तेनायुर्वेदानिरुद्धवैशेषिकसाङ्ख्यादिदर्शनभेदेन विरुद्धार्थोऽभिधीयमानो न पूर्वापरविरोध-
मावहतीति” प्रतिपादयन्, यत्र तत्र विकीर्णानां विचाराणां सङ्कीर्णतां विशङ्खलताञ्च दृढयति ।

तत्र तावत्प्रसिद्धदर्शनशास्त्रीयसिद्धान्तैः समं चरकसंहिताप्रतिपादितानां सिद्धान्तानां समन्वयापादनाय
संवायसंभाषाविधया तुलनात्मकदृष्टिविशिष्टः समीक्षारूपोऽयमारंभः । यद्यपि चरकसंहितायां यत्र तत्र विभिन्नेष्व-
ध्यायेषु प्रसङ्गसङ्गता इतस्ततो विप्रकीर्णाः सङ्कीर्णा दार्शनिकविचारा उपलभ्यन्ते तथापि शारीरस्थानस्यादिषोऽवधारयः
प्राधान्येन दार्शनिकसिद्धान्तप्रतिपादनपरः । तत्र द्वादशभिः श्लोकैरभिप्रेतकृताः प्रश्नाः, चत्वारिंशदुत्तरेण शतेन च
श्लोकानां भगवतः पुनर्वसोत्तराणि गुम्फितानि सन्ति । सौलभ्येन दार्शनिकसिद्धान्ताः वाचकानां मतिमार्गमाः
स्युरित्येतिहासिकसरणिमनुसृत्य विचारसंखल्यितुकामैरस्माभिः कृता संहिताकमोल्लेखना सतां न विरसता-
मापादयिष्यतीत्यस्माकमाश्वासः ।

स्वास्थ्यसंषादनशास्त्रे चतुर्विधपुमर्थाधिकारी मनुजोऽधिक्रियत इत्यत्र न कापि विचिकित्सा ।
सुश्रुतसंहिताकृद्ध्येतदेवाह “ अस्मिंस्तु शास्त्रे पञ्चमहाभूतशरीरिसमवायः पुरुषः सोऽधिष्ठानं तस्मिन्क्रिया
इति । सोऽयं पुरुषः चिकित्सायां जीवद्रोऽधिक्रियते नाऽजीवन् । जीवितविरहिते त्वस्या आनर्थक्यादसम्भवाच्च ” ।
अत एव “ शरीरं नाम चेतनाधिष्ठानभूतं पञ्चमहाभूतविकारसमुदायात्मकं समयोगवाहि ” (च. शा. ६-४)
इत्यभिवेशेन चेतनाधिष्ठितमेव शरीरं व्याख्यायि । चेतनाधिष्ठितशरीरात्मकस्यास्य चिकित्साऽधिकृतपुरुषस्य
पञ्चमहाभूतविकारविभागस्तु शारीरविचयनाग्नि शारीरस्थानस्य षष्ठेऽध्याये विस्तरेण निरूपितः, नाऽत्र
लेखनीप्रचारणप्रयासो विधीयमान उचितः स्यादिति विरम्यते ।

पूर्वोक्तविचारप्रणालिकामनुसृत्यैव “कृतिधा पुरुषो धीमन्” इत्येष प्रश्नो मूर्धन्यत्वेन च
प्रथममुपन्यस्तः । स्वल्पाक्षरैरात्मतत्त्वप्रकटनपरस्य पुनर्वसुप्रदत्तस्य “ खादयश्चेतनाषष्ठा धातवः पुरुषः स्मृतः ।
चेतनाधातुरप्येकः स्मृतः पुरुषसंज्ञकः ॥ ” इत्येतस्योत्तरस्य च सङ्गतये पूर्वोक्तप्रणालिकानुसरणमेव धारणीकरणीयम् ।

पुरा किल प्राच्यैर्महर्षिभिरात्मा पुरुष इत्यादयः शब्दा नैकार्थबोधकत्वेन प्राक् व्यवहृता दृश्यन्ते तथाऽत्रापि “खादयश्चेतनाषष्ठा धातवः पुरुषः स्मृतः” इति पुरुषशब्दो मनुष्यार्थो “चेतनाधातु-
रप्येकः स्मृतः पुरुषसङ्गः” इत्यनन्तरवाक्य आत्मार्थश्च व्यवहृतो दृश्यते । तथैव खादीनां चेतनायाश्च
“धातवः” इति धातुशब्देनाभिधानं तच्च प्राक्कालिकम् । पुरातनबौद्धसाहित्येऽपि तथैव धातुशब्दव्यवहारस्य
षड्धातूनां समुदाये मनुष्यत्वव्यवहारस्य च दर्शनात् । अत्र पुरुषशब्दस्य व्याधिख्यासया चक्रपाणिना
“अयञ्च वैशेषिकदर्शनपरिगृहीतश्चिकित्साशास्त्रविषयः पुरुषः” इत्युक्तम् । यद्यपि वैशेषिकसूत्रे आत्मनः
प्रध्वन्यनश्वोपात्तम् अत्र तु केवला चेतनैव, तेनात्र चेतनाशब्देनात्ममनसोद्भयोऽपि ग्रहणं विधेयमिति
चक्रपाणेरभिप्रायो बोध्यः । यद्यपि चरके पात्र षड्धातुविस्ताररूपायास्तत्त्वानां चतुर्विंशतिः परमपञ्चमेऽपि चतु-
र्विंशतितत्त्वात्मकः पुरुष इत्यस्माद्विचारः तत् षड्धातुसमुदायः पुरुष इत्येष विचारः प्राचीनतरः प्रतिभाति ।
सुश्रुतेनाऽपि सूत्रस्थाने शारीरस्थाने च “पञ्चमहाभूतशरीरिसमवायः पुरुषः” इत्येवं प्राचीनविचार
उपन्यस्तः ।

सृष्टिप्रक्रिया—“पुनश्च धातुभेदेन चतुर्विंशतिकः स्मृतः । मनो दशेन्द्रियाण्यर्थाः प्रकृतिश्चाष्ट-
धातुकी” ॥ इति मनोज्ञानेन्द्रियाणि कर्मेन्द्रियाण्यष्टधातुकी प्रकृतिश्चेत्युक्तं तत्त्वचतुर्विंशतिः षट् तत्त्वविस्तररूपा ।
अत्र खादीनि बुद्धिरव्यक्तमहङ्कारस्तथाष्टमः । भूतप्रकृतिरुद्दिष्टेति गगनानिलानलजलेलाः पञ्चभूतानि
बुद्धिरव्यक्तमहङ्कारश्चेत्यष्टधातवाऽऽत्मिका भूतप्रकृतिर्बोध्या । इयं प्रकृतिश्चाष्टधातुकीरुदितिः सङ्ख्यानुसारिणी ।
तथा हि साङ्ख्याः “मूलप्रकृतिरविकृतिर्ब्रह्मदद्याः प्रकृतिविकृतयः सप्त षोडशकश्च विकारः” इति
चतुर्विंशतितत्त्वेषु षोडशविकागमष्टौ प्रकृतीति कथयन्ति ।

यद्यपि चरकेण महदादीनां प्रकृतिविकृतिर्त्वं शब्देनाम्नानं तथापि “अव्यक्ताद् बुद्धिरुत्पन्ना
बुद्ध्याहमिति भन्यते । परं खादीन्यहङ्कारादुत्पद्यन्ते यथाक्रमम्” इति वचनादव्यक्तान्महदादीन्युत्पद्यन्ते ।
महदादिभ्यश्चाहङ्कारादय इत्यर्थतो महदादीनां प्रकृतिविकृतिस्त्वमनामन्त्रितमेवायातीति न तन्निरोद्धं शक्यते, चरक-
संहितायां कण्ठरवेण खादीनि बुद्धिरव्यक्तमहङ्कारस्तथाष्टमः । भूतप्रकृतिरुद्दिष्टेति केवलं प्रकृतिस्त्वमेवाप्युक्तं न चैतेषां
कुत्रापि विकृतिस्त्वमन्नातं तच्चोपपादयितुं परं खादीन्यहङ्कारादुत्पद्यन्ते यथाक्रममित्यस्याहङ्कारादनन्तरं
खादीनि स्थूलभूतान्युत्पद्यन्त इत्यर्थो बोध्यः । तथात्वे चाहङ्कारस्य खादीनामुपादानता निराक्रियेत ।
प्रकृतिरूपाण्यनादीनि खादीनि भूतानि, अहङ्कारानन्तरं चैतेषामुत्पत्तिश्चेत्तमं विरोधं शमयितुं पन्तराभूतैश्चतुर्भिः
सहितः सुक्ष्मैरित्युक्तानि सूक्ष्मभूतानि स्वीकर्तव्यानि, यान्यनुत्पत्तिमत्त्वेन प्रकृतिरूपाणि स्युः येभ्यश्च स्थूलभूताना-
मभिव्यक्तिरूपोत्पत्तिश्च सुसंगता स्यात् । यदि च यथार्थोत्पत्तिमद्वैतमिताऽभिव्यदेतानि विकृतिस्त्वनाप्यपठि-
ष्यत् किन्तु न विकारेषु भूतानि पठितानि केवलं प्रकृतिस्त्वैवोक्तानि, अतः प्रकृतिरूपाणि सूक्ष्मभूतानि
परमाणुतुल्यानीति समाधिः । “विकारजननीं मायामष्टरूपामजां ध्रुवाम्” इति श्रुतौ प्रोक्तव्यष्टसु रूपेषु खादय-
श्चेतनाषष्ठा धातवः पुरुषः स्मृत इत्युक्तानां चेतनाषष्ठानां खादीनां समावेशस्य सुसंगतेश्च । व्यक्ततरुणा-
न्वायवादीश्चतुर इत्यत्रोत्पाद्यमानानां वाय्वादीनां व्यक्ततरुणत्वोक्तेरुत्पाद्यानां नित्यानामव्यक्तगुणता चार्थतः
प्राप्यत एव । एतेन अव्यक्तगुणानामेतेषां केनाप्युक्तं तन्मात्रात्वं परमाणुत्वं वा सुसंगतं स्यात्, आचार्यवर्य-
श्रीगोडपादैरपि कारिकाभाष्ये तन्मात्राणां परमाणुत्वस्वीकृतेश्च । “भूमिरापोऽनलो वायुः खं मनो बुद्धिरेव च ।
अहङ्कार इतीयं मे भिन्ना प्रकृतिरष्टधा” ॥ इति भगवद्गीतायां, “अव्यक्तकर्मजा बुद्धिरहङ्कारं प्रयुजते ।
आकाशश्चाप्यहङ्काराद्बुराकाशसंभवः ॥ वायोस्तेजस्तत्त्वाप अद्भ्यः स्य वज्रोद्भवा । मूलप्रकृतयो ह्यष्टौ जगदेता-

स्ववस्थितम् ॥ ” (म. शा. २१२, ४०-४१) इति महाभारते च प्रकृतौ पञ्चमहाभूतानि दृश्यन्ते ॥ साङ्ख्यै-
रुक्तास्तन्मात्रा एव । ज्ञानेन्द्रियाण्यतः पञ्च पञ्च कर्मेन्द्रियाणि च । समनस्कश्च पञ्चार्था विकारा इति
संज्ञिताः ॥ (च. शा. १-६४) इति महाभारते चरके च विषयपदेन चोक्ताः । “पृथिवी च पृथिवीमा-
त्रा चापश्चापोमात्रा” इति प्रश्नोपनिषदि गुणाश्च मात्राशब्देनोक्ताः । “मात्रास्पर्शास्तु कौन्तेय” इति भगवद्गीतासु
विषया मात्राशब्देनोक्ताः न्यादेतदेव साङ्ख्यैरुक्ततन्मात्राप्रभवस्य स्थानमिति केषाञ्चिन्मतम् । यद्यपि चरकचतुर-
ननश्चक्रपाणिः खादीनि सूक्ष्मभूतखादीनि तन्मात्रशब्दाभिधेयानि इति व्याख्याति परमेतदैतिहासिकदृष्टिविधुरस्य
चक्रपाणेः प्रमाद एव, तन्मात्रशब्दस्य साङ्ख्यैरेवोद्भवनात् । चरके तन्मात्राशब्दानुपलब्धेति कैश्चिदुक्तं तत्त्वापातर-
मणीयमिव विद्यते वेदान्तिभिर्द्यथा सृष्टिप्रक्रियायामनाम्नातान्यपि भूतसूक्ष्माणि संहारप्रक्रियायां लिङ्गशरीरप्रस्तावे
“तदनन्तरप्रतिपत्तौ रंहति संपरिब्रूतः” इत्यादिना महताटोपेनोच्यन्ते तथैवात्र सृष्टिप्रक्रियायामनाम्नातान्य-
न्यपि सूक्ष्मभूतानि संहारप्रक्रियायां लिङ्गशरीरप्रस्तावे “भूतैश्चतुर्भिः सहितः सुसूक्ष्मैर्मनोजवो देहमुपैति देहात्”,
“अनीन्द्रियैश्चैतैरित्येवमात्मनो देहादेहान्तरप्रापकाणि वीर्यधर्मिरूपाण्यतीन्द्रियाणि सूक्ष्मभूतान्युक्तानि ।
उत्पत्तिप्रस्तावेऽनिर्दिष्टान्यपि तान्यकामैरपि हठात्स्वीकर्तव्यानि, एतानि तन्मात्राशब्दाभिधेयार्हाणि न वेति नास्माक-
माग्रहः । शब्दभेदस्वीकारेऽप्यर्थशेषादनस्याशक्यत्वात् । केवलमिमानि सूक्ष्मभूतानि तन्मात्राणीव गुणरूपाणि
गुणरूपाणि वेति सुधीभिर्विवेचनीयम् ।

उपनिषत्सु सृष्टिप्रक्रियायां महत्त्वमहंकारश्च नोपलभ्येते “ततोऽसृजत, तदपोऽसृजत” इत्येवं
छान्दोग्योपनिषदि, “आकाशाद्वायुर्वायोरग्निरग्निरापोऽद्भ्यः पृथिवीति” तैत्तिरीयोपनिषदि च पृथक्सृष्टि-
क्रमोऽवलोक्यते, ब्रह्मसूत्रकृता भगवता व्यासेन तु “तस्माद्वा एतस्मादात्मन आकाश आकाशाद्वायुर्वायोरग्निरग्ने-
रापोऽद्भ्यः पृथिवीत्येष क्रमः स्वीकृत इति ब्रह्मसूत्रद्वितीयाध्यायतृतीयपादे विचारिते निश्चीयते । कठो-
पनिषदि “इन्द्रियेभ्यः परा ह्यर्था अर्थेभ्यश्च परं मनः । मनसस्तु परा बुद्धिर्बुद्धरात्मा महान्परः । महतः परमव्यक्त-
मव्यक्तपुरुषः परः” इति मनोबुद्धिमहदव्यक्तानि, प्रश्नोपनिषदि च मनोबुद्ध्यहंकारचित्तान्याध्यात्मिक-
द्रव्यत्वेनोक्तानि तानि च सर्वाणि ब्रह्मणो जातानीति । यद्यपि ब्रह्मसूत्रकृद् “अन्तरा विज्ञानमनसी क्रमेण
तल्लिङ्गादिति चेन्न अविशेषात्” इत्यनेनाकाशात्प्राग्वमनसो बुद्धेश्च सत्त्विवेशं निवारयति । महाभारते पुराणेषु
चाव्यक्तबुद्धयहङ्कारविशिष्टा सृष्टिकल्पना च दृश्यते । सोऽयं क्रम एव ईश्वरकृष्णेन साङ्ख्यकारिकायां सुदृढं
निरूपितः, चरकोक्तः सृष्टिक्रमो बहुधा साङ्ख्यकारिकामनुसरन्नपि कश्चिद्विभिन्नप्रस्थानीय इव भिद्यते । अत्र
सात्त्विकादिभेदविशिष्टोऽहङ्कारश्चरके न पठ्यते इति कैश्चिदुक्तं तद्विचित्रमात्रमेव । त्रिविधं खलु सत्त्वं शुद्धं
राजसं तामसमिति मनसस्त्रिगुणत्वस्य, तथा आत्मा च सगुणः गुणी, इत्येवमात्मनः सगुणत्वस्य शब्देन पठित-
त्वेन मध्यपातिनोर्बुद्धयहङ्कारयोरनाम्नातमपि त्रिगुणत्वं, कार्यगुणानां कारणगुणपूर्वकत्वनियमात् सिद्धमेव ।
तथा “सात्त्विक एकादशकः प्रवर्तते वैकृतादहङ्कारात् । भूतदेहस्तन्मात्रः स तामसस्तेजसादुभयम्” । तन्मात्राण्य-
विशेषास्तेभ्यो भूतानि पञ्च पञ्चभ्यः” इति साङ्ख्यैर्निरूपितं मनःसहितानां दशेन्द्रियाणामाहङ्कारिकत्वं तथा
महाभूतानां तन्मात्राभ्यो जायमानत्वञ्च चरके नास्ति । चरके तु पञ्चमहाभूतविकारसमुदायात्मकानीन्द्रियाणि
स्वीक्रियन्ते । अर्थात्साङ्ख्यकारिकाकृन्मत इन्द्रियाणामाहङ्कारिकत्वं, चरकसंहिताकृन्मते तु भौतिकत्वम् ।
शारीरकभाष्ये “यदि तावद्भौतिकानि करणानि”, “अथ स्वभौतिकानि करणानि” इत्येवमुभयविधोऽल्लेखदर्शना-
दाचार्यस्य नान्यतरपक्षे पक्षपात इवास्ति । केवलं परवर्तिनो वेदान्तसारकृदादयः सूक्ष्मभूतेभ्यो बुद्धे-
र्मनस इन्द्रियदशकस्य चोत्पत्तिं वर्णयन्ति ।

[illegible]

[illegible]

46

[illegible]

इति वैशेषिके दृश्यन्ते । केवलमत्र प्रेरणं धारणञ्च न लभ्येते । चरकेण सूत्रेण उन्मेष आद्यशब्देन गृहीतः । इन्द्रियान्तरविकारस्य स्थान इन्द्रियान्तरसंचारश्च कृतः चेतनाबुद्धिश्रोके । चेतनाशब्देन बुद्धेरगतार्थत्वात्पुनरुक्तिर्मा प्रसज्येतेति टीकाकृद्भिः—“यद्यपि बुद्धिशब्देन चेतनाधृतिस्मृत्यद्वयकाराः प्राप्यन्त एव बुद्धिप्रकारत्वेन तथापि पृथक् पृथगर्थगमकत्वेन पुनः पृथगुपात्ताः । तथाहि चेतना गुणत्वेनाचेतनखादिभूतातिरिक्तधर्मेणाऽऽत्मानं गमयति । बुद्धिस्तुद्वापोद्वयोरैकं कारणं गमयत्यात्मानम् । इति समाहितम् ।

न्यायसूत्रकृत्, बुद्धिपर्यायं ज्ञानं सुखदुःखादिभिः सह “इच्छाद्वेषप्रयत्नसुखदुःखज्ञानान्यात्मनो लिङ्गम्” (न्या. सू. १-१-१०) इत्यात्मलिङ्गत्वेन ग्राहयति । स्मरणं त्वात्मनो ज्ञस्वाभाव्यात्” (न्या. सू. ३-२-४१) इति स्मृतिज्ञात्मलिङ्गत्वेन निर्दिश्यापि लिङ्गपरिगणनप्रस्तावे तस्या बुद्ध्या गतायत्नां ज्ञापयति ।

“अहमिति प्रत्यगात्मनि भावात्परत्राऽभावादर्थान्तरप्रत्यक्षः” (बै. सू. ३-२-१४) इति वैशेषिकैरर्थतोऽद्वयारस्यात्मलिङ्गतोका । “प्रेरणं धारणञ्च प्रयत्नभेदः” (न्या. सू. ३-५-३९) “परतन्त्राणि भूतेन्द्रियमनांसि धारणप्रेरणव्यूहनक्रियासु प्रयत्नवशात्प्रवर्तन्ते” (न्या. सू. ३-२-४०) इति वात्स्यायन आह । स्वप्ने देशान्तरसञ्चारः पञ्चवत्प्रवृत्तं च चरकेणाऽधिके उक्ते । तत्रापि स्वप्ने देशान्तरसञ्चारः—तद्यथा महामत्स्य उभे कूले अनुसञ्चरति पूर्वञ्चापरञ्चैवमेवार्थं पुरुष एतावुभावन्तःपुनःपुनरिति स्वप्नान्तञ्च बुद्धान्तञ्च । (वृह. ४-३-१८) इति ध्रुवमूलकः स्यात् । “दृष्टस्य दक्षिणेनाक्षणा मध्येनावगमस्तथा” इत्युक्तं लिङ्गं तु गौतमेन सव्यदृष्टस्येतरेण प्रत्यभिज्ञानात् (न्या. सू. ३-१-७) इति देहव्यतिरिक्तानुसाधकत्वेनोपात्तम् । प्राणापानौ श्वाशोच्छ्वासरूपौ तौ च निमेषोन्मेषौ च प्रत्यक्षाः । तेषां प्रयत्ने समावेश उचितः, नात्र पृथग्गणनाह्निः ।

“प्राणोदानसमानाख्यव्यानापानैः स पञ्चधा” (च. वि. २८) इत्यन्वयः स्वयं पञ्चधाऽभिहितोऽपि वायुरत्र वैशेषिकैरेव प्राणापानात्मा द्विविध एवाङ्गीकृतः । उपस्कारकुञ्जकुरमिश्रो जीवनपदेन लक्षणया जीवनकार्यं वृद्धिक्षतभग्नसरोहणादि लक्ष्यतीत्याह । एतस्यापि प्रयत्ने समावेश उचितः ।

वेदान्तिनामात्मा निर्विशेषचैतन्यात्म उपलब्धिरूपोऽकर्ताऽभोक्ता । साङ्ख्यानामकर्ता सञ्जपि भोक्ता, न्यायवैशेषिकानां कर्ता भोक्ता ज्ञाता चेति पुरस्तात्प्रतिपादितमेव । तत्र नैयायिकैर्ज्ञानेन ज्ञातृत्वं, सुखदुःखाभ्यां भोक्तृत्वमेच्छाद्वेषादिभिश्चात्मनः कर्तृत्वमुपपादितम् । जीवच्छरीरात्कृते चाचेतनशरीरेन्द्रियमनः-कार्याणां परिहारे यदवशिष्यते, यच्चानुभवन्नपि मनुजो विवेक्तुं न शक्नोति तदात्मलिङ्गत्वेन न्यायसूत्रकृतोपात्तम् । न च न्यायवैशेषिकसमये लक्षणैरनुपलभ्य आत्मा विद्यते अतस्तन्मते लक्षणैरनुमानप्रमाणेनैवात्मसिद्धिः सुतरां सङ्गच्छते । चरकेण तु लक्षणैरनुपलभ्यो भूतात्माऽभ्युपगम्यते । पुनः कोऽसौ यो लक्षणैरुपलभ्य उक्तः ? न च स राशिपुरुष इति वक्तुं पार्यते तस्य मन इन्द्रियादीनां राशिरूपत्वात् । उक्तानि लिङ्गानि त्विन्द्रियविरहितस्यैव संभवन्ति अतोऽध्यात्मद्रव्यसंग्रहोक्तश्चतुस्तत्त्वात्मकश्चेतनाधानुश्चरकस्य लक्ष्यभूत इति संभवनीयम् ।

चरकेणाभ्यत्र “उत्सादोच्छ्वासनिःश्वासचेष्टा धातुगतिः समा” इति (च. सू. १८-४९) उच्छ्वासनिःश्वातो वायोः कर्मत्वेनोक्तौ । इह पुनरात्मलिङ्गत्वेन, तथा मनसो गतिरिहात्मलिङ्गत्वेनोक्ता साऽभ्यत्र “नियन्ता प्रणेता च मनसः” (च. सू. १२-८) इति वाच्यधीनतयोका ।

न केवलं शारीरक्रिया अपि तु मानसक्रिया अपि वातपित्तकफादीनां इत्युक्तं सत्त्वावयवस्य चिकित्साङ्गत्वेनोक्तः, इत्येष प्रमादो वैशेषिकानुसरणेनैव जात इत्यनुमेयम् “इन्द्रियान्तरविकारः”

देहादिभिन्नात्मतत्त्वविषयविनिर्णये चरकस्यापि न्यायाद्यस्तिकदर्शनानामिदं सधृष्टपन्थाः । सत्यां बुद्धयहङ्कारस्मृतिभिः समानायां मनस आत्मलिङ्गतायां िमिति अन्तःकरणतावैशिष्ट्यमिष्यत इत्यत्र साम्प्रतिकमनोवैज्ञानिकसंरणिमनुसरन् न्यायमूत्रकृद्गवानक्षपादः “ न, आत्मप्रतिपत्तिहेतूनां मनसि संभवात् (न्या. सू. ३-१-१९) “ दर्शनस्पर्शनाभ्यामेकार्थप्रवृत्तात् ” इत्येवमादीनामात्मप्रतपादकानां हेतूनां मनसि संभवः, यतो मनो हि सर्वविषयमिति तस्माच्च शरीरेन्द्रियमनोबुद्धिष्वन्तर्व्यतिरिक्त आत्मेति ” पूर्वपक्षस्य “ ज्ञातु-ज्ञानसाधनोपपत्तेः संज्ञाभेदमात्रम् ” (न्या. सू. ३-१-१७) ज्ञातुः खलु ज्ञानसाधनान्युपपद्यन्ते चक्षुषा पश्यति, घ्राणेन जिघ्रति, स्पर्शनेन स्पृशति, एवं मन्तुः सर्वविषयस्य मत्तिसाधनमन्तःकरणभूतं सर्वविषयं विच्यते येनायं मन्यत इति, एवं सति ज्ञानतयात्मसंज्ञा न मृष्यते मनःसंज्ञाऽभ्यनुज्ञायते, मनसि च मनःसंज्ञा न मृष्यते मत्तिसाधनसंज्ञा च मृष्यते, तदिदं संज्ञाभेदमात्रं नार्थे विवाद इति ” (वात्स्या.) इति मनसोऽन्तःकरणतां साधयति । एवं ब्रह्म-सूत्रकृद्गवान्यासोऽपि तद्वदृष्टान्तेनाशरीरतत्त्वविचारे मनसः करणत्वमुपपादयति, “ यथा च तक्षोभयथा ” (ब्र. सू. २-३-४०) तक्षा हि विशिष्टेषु तक्षणादिव्यापारेष्वपेक्षैव प्रतिनियतानि करणानि वास्यादीनि कर्ता भवति, स्वशरीरेण स्वकर्तैव, एवमयमात्मा सर्वव्यापारेष्वपेक्षैव मनआदीनि करणानि कर्ता भवति ।” इति । प्रत्यक्षागोचरमतीन्द्रियं मनः केवलमनुमानेन सिषाधयिषुरात्रयो लिङ्गमाह “ लक्षणं मनसो ज्ञानस्याभावो भाव एव च । सति ह्यात्मेन्द्रियार्थानां सन्निकर्षे न वर्तते । वैवृथ्यान्मनसो ज्ञानं सान्निध्यात्तच्च वर्तते ॥ ” (च. शा. १) इति । यदा युगपदिन्द्रियार्था इन्द्रियैः संयुज्यन्ते तदा क्वचिदिन्द्रियार्थेन ज्ञानं भवति कन्विष्य नं भवतीति दृष्टं तेनेमौ ज्ञानभावाभावौ सत्यप्यात्मेन्द्रियार्थसन्निकर्षे किमपि ज्ञानकारणान्तरं दर्शयत”, यच्च तत्कारणान्तरं तन्मन इति । तथा च तस्य वृथ्यन्तरव्याप्तकत्वेऽसंयुक्तत्वे वा ज्ञानं न जायते, जायते च संयुक्तत्वं एव । उक्तञ्च “ आत्मेन्द्रियार्थसन्निकर्षे ज्ञानस्याभावो भावश्च मनसो लिङ्गम् ” (वै. सू. ३-२-१) “ युगपज्ज्ञाना नृत्पत्तिर्मेनसो लिङ्गम् (न्या. सू. १-१-१९) “ युगपच्च खलु घ्राणादीनां गन्धादीनां च सन्निकर्षेषु सत्य युगपद् भवानि नोत्पद्यन्ते तेनानुमीयतेऽस्ति तत्तदिन्द्रियसंयोगि सद्वकारि निमित्तान्तरमव्यापि यस्याऽसन्निकर्षे-

नोत्पद्यते ज्ञानं सन्निधेश्चोत्पद्यते” इति (वास्त्यायनः) । चरकेणापि “तत्रात्मप्रत्यक्षाः सुखदुःखेच्छाद्वेषादयः (च. वि. ८-३९) इति वदता सुखदुःखेच्छाद्वेषादीनां मनोगोचरता प्रतिपादिता, रूपादिभ्यश्च विषयान्तरं सुखादयः, चक्षुरादिभिः सुखादयो न गृह्यन्त इति करणान्तरेण भवितव्यं यच्च सुखाद्युपलब्धौ करणं तच्च मन इति सिद्धम् । एतच्चारमेन्द्रियमनोऽर्थसन्निकर्षात् सुखदुःख इति वैशेषिकवचनाविरुद्धम् ।

तच्च, मन एकमुतानेकमिति न शङ्कालेशावसरः ‘अणुत्वमथ चैकत्वं द्वौ गुणौ मनसः स्मृतौ’ (च. शा. १-१९) इति सिद्धान्तं प्रतिष्ठापयिषुराचार्यः पूर्वपक्षं निराकुर्वन्नाह “स्वार्थेन्द्रियार्थसङ्कल्पव्यभिचरणाच्चेनेकमेकस्मिन्पुरुषे सत्त्वं सत्त्वगुणशोभाच्च । न चानेकत्वं न ह्येककालमनेकेषु प्रवर्तते तस्माच्चैककाला सर्वेन्द्रियप्रवृत्तिः” (च. सू. ८-५) तथाहि—एकमेव मनो यदा धर्मं चिन्तयेत्तदा धर्मचिन्तनं यदा कामं चिन्तयेत्तदा कामचिन्तकमित्येवं स्वार्थचिन्त्यादिव्यभिचरणे, यदा रूपं गृह्णाति तदा रूपप्राप्तकं, यदा गन्धं गृह्णाति तदा गन्धप्राप्तकमितीन्द्रियार्थव्यभिचरणे, कदाचिन्ममेदमुपकारकमिति गुणकल्पकं, कदाचिन्ममेदमपकारकमिति दोषकल्पकमिति सङ्कल्पव्यभिचरणे तथा यदा क्रोधादिमद्भवति तदा अगोचुर्गुणं यदाऽज्ञानभयादिमद्भवति तदा तमोगुणं यदा सत्यशौचादिमद्भवति तदा सत्त्वगुणमिति गुणव्यभिचरणेऽभिन्नमपिभिन्नमिव व्यपदिश्यते तदुक्तं “यद्गुणं चाभीक्ष्णं पुरुषमनुवर्तते सत्त्वं तद्वत्स्वमेवोपादिशन्ति बहुल्यानुशयात्” (च. सू. ८-६) नानाविधानि त्वस्तु सत्त्वानि, तानि सर्वाणि एकपुरुषे भवन्ति न च भवन्त्येककालं, एकं तु प्राचोवृत्त्याह (च. शा. ३-१३) देवदत्त-यज्ञदत्त-विष्णुभिरेषु शरीरिष्वनेन मन एककालं युगपदेनेकेषु रूपादिज्ञानेषु प्रवर्तमानं दृश्यते तथैव यद्येकस्मिन्पुरुषे बहूनि मनांसि द्युस्तः स्युःपि युगपद्रूपादिज्ञाने प्रवर्तन्ते, न तु तथा, न च दीर्घशङ्कुली-मक्षणादौ युगपत्पञ्चज्ञानोत्पत्तिप्रतीतिरिति वाच्यम् ; अलातचक्रदर्शनवद्युगपदुत्पलपत्रशतव्यक्तिभेदज्ञानवद्भ्रान्तिरेव सति । एवं मनसो विभुत्वे सर्वदा युगपत्सर्वेन्द्रियैः सह संयोगसत्त्वे युगपद्रूपादीनां सर्वेषां ज्ञानं स्यात्, न च भवति तस्मादेकमणु च मनः, तदुक्तं “ज्ञानायौगपद्यादेकं मनः (न्या. सू. ३-२-५८) “इत्येता यौगपद्याज्ज्ञानायौगपद्याच्चैकं मनः” (वै. सू. ३-२-३) “तद्भावादणु मनः” (वै. सू. ७-१-२३) “यथोक्तहेतुत्वाच्चाणु” (न्या. सू. ३-२-६१) इति । यद्यप्येतावता ध्यानात्मकं (Attentive) मनः सिद्ध्यति, भगवता शङ्कराचार्येणापि भगवद्गीताभाष्ये (२-८४) समाधिरन्तःकरणमित्युक्तं तथाप्येव न भेदेन मनः-स्वीकारावश्यं तथापि सुखदुःखादिकरणस्वान्यथानुपपत्त्या मनसः पार्थक्येन परिगणनं सम्प्रदायशुद्धमिति न विस्मरणीयम् ।

“अन्यत्रमना अभूवं नादर्शम्, अन्यत्रमना अभूवं नाश्रीषम् । मनसा ह्येव पश्यति मनसा शृणोति” इति मनःकरणताप्रतिपादनप्रवृत्ता श्रुतिः “कामः सङ्कल्पो विचिकित्सा श्रद्धाऽश्रद्धा धृतिरधृतिर्हीर्षीर्मांसिरेत्येतत्सर्वं मन एव” इति सङ्कल्पादिभिः समं कामं धियश्च मनोवर्मेत्वेन ब्रह्मपीपदत् । पर्यजीगणचक्रस्तु न्यायवैशेषिकमतमनुवदन्नात्मलिङ्गत्वेन त एव इच्छाबुद्धी । इत्थमुपलभ्यमानेऽपि मनोवर्मेविषयकामिनायभेदे, औपनिषदानां तदनन्तरवर्तिनाश्च न सर्वथा मनस आत्मकरणताऽभिप्रायो मिश्रते । “इन्द्रियेभ्यः परा ह्यर्था अर्थेभ्यश्च परं मनः । मनसस्तु परा बुद्धिर्बुद्धेरात्मा महान्परः” इति कठोपनिषदि मनोबुद्धिश्चेति द्वयं “मनश्च मन्तव्यश्च बुद्धिश्च बोद्धव्यश्चाहंकारश्चाहंकारव्यञ्च चित्तञ्च चेतयितव्यश्चेति” प्रश्नोपनिषदि मनोबुद्धिरहंकारश्चित्तं चेति चतुष्टयमन्तःकरणत्वेनोपात्तम् । साङ्ख्यैश्चरकानुयायिभिश्च मनोबुद्धिरहंकारश्चेति त्रिधान्तःकरणमुक्तमिति तु पुरस्तादेवावोचाम । साङ्ख्यास्तु “मनःसङ्कल्पकम्” इति मनोलक्षणम् ; “अध्यवसायो बुद्धिर्धर्मो ज्ञानं विराग ऐश्वर्यं, सार्विकमेतद्रूपं तामसमस्माद्विपर्यस्तम्” इति बुद्धिलक्षणम् ; “अभिमानोऽहंकारः” इत्यहंकारलक्षणमुक्तम्,

“युगपच्चतुष्टयस्य हि वृत्तिः कमशश्च तस्य निर्दिष्टा, दृष्टः” इति प्रत्यक्षविषये तेषां त्रयाणां युगपस्कमशश्च प्रवृत्तिं जगुः । “वृत्तयः पञ्चतयः क्लिष्टाऽक्लिष्टाः” (यो. सू. १-५) “प्रमाणविरर्थाविकल्पनिर्मा-
स्मृतयः” (यो. सू. १-६) इति पातञ्जलाः पञ्चधा चित्तवृत्तिमभिदधुः । वेदान्तिभिस्तु “मनो-
बुद्धिश्चित्तमहङ्कारः” चेत्यन्तःकरणचतुष्टयमुरीकृतं परं भगवतः शङ्कराचार्यस्य नात्र
सङ्ख्यामभिलक्ष्य कोऽप्यभिविवेश इति । तच्चात्मन उपाधिभूतमन्तःकरणं मनो बुद्धिर्विज्ञानं
चित्तमिति वानेकधा तत्र तत्राभिलप्यते । क्वचिच्च वृत्तिवेभागेन संशयादिवृत्तिरुं मन इत्युच्यते
निश्चयादिवृत्तिकं बुद्धिरिति । इत्युक्तान्त्यधिकरणस्य भाष्यादनुमीयते । वेदान्तसारकृच्च चित्तं मनसि,
अहङ्कारश्च बुद्ध इत्युच्यते “पञ्चभागवतो बुद्धि इतिन्द्रियमभिविवेशम् । अपञ्चोक्तभूतोऽर्थं सूक्ष्माङ्गं भोग-
साधकम्” इति साम्प्रदायिकवचनावलम्ब्यमन्तःकरणद्वयं साधयाम्भवत् । भगवता चरकेणापि
त्रिधाऽन्तःकरणमुक्तिर्युक्तं प्राक् । चित्तं च विचार्यमुख्यञ्च ध्येयं सङ्कल्पमेव च ।
यत्किञ्चिन्मनसो ह्येयं तत्तत्रैव ध्येयं प्रज्ञातम् (शा. १-२०) इति मनोविषयाः इन्द्रियमिन्द्रियः
कर्म मनसः स्वस्य निग्रहः ऊहो विचारश्च इति (शा. १-२१) मनः कर्म चोक्तम् । नात्र मनः
कर्मसु सङ्कल्पानुल्लेख इति वाच्यं सत्यप्यक्षरेणानुल्लेखे, ऊहेन विचारेण वा गतार्थतामङ्गीकृत्यार्थोल्लेखसाधने
न कापि क्षतिः संभावनीया । “इन्द्रियेन्द्रियार्थौ हि समनस्तेन गृह्यते । कल्प्यते जनसा तूर्ध्वं गुणतो दोषतोऽथ वा ।
आयते विषये तत्र या बुद्धिर्निश्चयातिनका व्यवस्यते तया वक्तुं कर्तुं वा बुद्धिपूर्वकम्” इति (शा. १-२२-२३) ।
बुद्धेः प्रवृत्तेर्वेदेषुणा महर्षिणा प्रादर्शितं निखिला विषयग्रहणप्रक्रिया । “या यद्विन्द्रियमभिविवेशं तन्नोर्बुद्धेः
प्रवर्तते । याति सा तेन निर्देशं मनसा च मनोभवा (शा. १-३२) इत्यन्यत्र कार्येन्द्रियार्थानां भेदादुत्पद्यमानानि
समग्रानि ज्ञानानि बुद्धिशब्देन निर्दिशता च बुद्धेर्ज्ञानमर्यायता साधिता । “त्रिविधं खलु सत्त्वं शुब्धं
राजसं तामसम्” (च. शा. ४-३६) इति गुणत्रयविशिष्टमन्तःकरणमुक्तं तच्च चेतनाशून्यं, यदि
मनश्चेतनं स्याच्छरीरमिदमात्ममनःसाधारणमुपभोगसाधनं स्यात्, तथा च पृथगपृथगभिप्रायानुरूपमितस्तत्र
आकृष्यमाणं बहुनायकं राजपमिवोन्मथ्येत । न चैवमस्ति, एकभिप्रायेणैव तस्य प्रवृत्तिनिवृत्तिदर्शनात्तस्मादचे-
तनमेव मनः । प्रशस्तपादेनाप्यत्र “साधारणे विग्रहवत्प्रसंगादज्ञत्वम्” अगादि । चरकेणैतत्सर्वमभिसन्धायोक्तम्—
“अचेतनं क्रियावच्च मनश्चेतयिता परः, युक्तस्य मनसा तस्य निर्दिश्यन्ते विभोः क्रियाः । चेतनावान्यतश्चात्मा
ततः कर्ता निरुच्यते, अचेतनत्वाच्च मनः क्रियावदपि नोच्यते” इति (च. शा. १-१०-११-१६) तच्छरीरस्य तन्त्रकमात्मन-
संयोगादिति करणत्वादात्मतन्त्रं चैतदिते ।

इन्द्रियाणि—पञ्च बुद्धीन्द्रियाणि तद्यथा “स्पर्शनं रसनं घ्राणं दर्शनं श्रोत्रमिति” (च. शा. ५-७) “हस्तौ पादौ गुह्येऽस्यं वागिन्द्रियमथापि च, कर्मेन्द्रियाणि पञ्चैव” इति (च. शा. १-२५) चरकेण सांख्यैर्बैदान्तिभिरिव पञ्च ज्ञानेन्द्रियाणि पञ्च कर्मेन्द्रियाणीति दशेन्द्रियाणि प्रोक्तानि । एतदभिलक्ष्य
कर्मेन्द्रियखण्डनं जयन्तभट्टेन न्यायमज्जया विस्तरेणोक्तं तत्रावलोक्य केवलं वाचकमनोविनोदनार्थं सङ्क्षेपतोऽत्र निर्दि-
श्यते । “अत्यल्पमित्युच्यते पञ्च कर्मेन्द्रियाणीति; अन्यान्यपि खलु न सन्ति कर्मेन्द्रियाणि? तथाहि कण्ठोऽन्ननिगारेण,
स्तनकलशोऽल्लिङ्गनादिना वक्षः, भारवहनेन चांसद्वयमिन्द्रियमुच्यते न कथम्? तत्कार्यस्य शरीरावयवान्तरेऽपि
दर्शनादिति चेत्किन्तु भवानन्नपानं पाणिपादेन निगिरति पायुना वा? आदानमपि किमास्यादिना वा न
कुर्वते तिर्यक्चो मनुष्या अपि हि क्वचिन्? असत्स्वपि भवत्कल्पितेऽपि चिद्विषयेषु तत्कार्यं यावत्तावदन्यथाऽपि
दृश्यते न त्वेवं बुद्धीन्द्रियेषु—

भवत्युत्पाटिताक्षस्य न मनानपि रूपधीः । ईषद्विद्वारादानादि दृष्टं यन्वाङ्मियाणिषु ॥ इति

“तैजसादिन्द्रियाण्येव ज्ञानकर्ममयानि च” इति साङ्ख्यसूत्रानुभयविधानीन्द्रियाण्यहंकारिकाणीत्युक्तम् । वेदान्तपरिभाषायां तु “एतैश्च सत्त्वगुणोपेतैः पञ्चभूतैर्व्यस्तैः पृथक् पृथक् कमेण श्रोत्रत्वक्चक्षूरवनप्राणाख्यानि पञ्च ज्ञानेन्द्रियाणि जायन्ते” इति बुद्धीन्द्रियाणां कर्मेन्द्रियाणाञ्चापञ्चीकृतभूतप्रभवत्वमुक्तम् । चरकेण तु काणिलपद्धतिं वेदान्तमार्गञ्च परिहाय न्यायप्रथममुत्सृज्य पञ्चीकृतपञ्चमहाभूतैर्मय इन्द्रियाणामुत्पत्तिं प्रतिविषादयिषुणा “तत्रापि पञ्चमहाभूतविकारसमुदायात्मकानामपि सूत्रामिन्द्रियाणां तैजश्चक्षुषि, खं श्रोत्रे, घ्राणे स्थितिः, आपो रसने, स्पर्शनेऽनिलो विशेषेणोपपद्यते । तत्र यदात्मकमिन्द्रियं विशेषात्तदात्मकमेवार्थमनुगृह्णाति तत्स्वभावाद्विभुत्वाच्च” इत्युक्तम् । पाञ्चभौतिकत्वेऽपि तेजोऽधिकत्वाच्चक्षुस्तैजसं व्यपदिश्यते । एवं घ्राणादिवपि पृथिव्याधिकत्वेन पार्थिवत्वादिव्यपदेशः । यदिन्द्रियं विशेषाद् भूयस्त्वेन यदात्मकं यद्भूतारब्धं तदिन्द्रियं तदात्मकं तद्भूतात्मकमेवार्थं विषयं गृह्णातीति चक्रपाणिनेन्द्रियाणां तदात्मकता व्याख्याता । “भूयस्त्वाद्भवत्वाच्च पृथिवी गन्धज्ञाने प्रकृतिः” (वे. सू. ८-२-५) इति प्रतिनियतविषयग्रहणे कणभुजा भूयस्त्वमेव हेतुर्दत्तः । वात्स्यायनेन च “दृष्टो हि प्रकर्षे भूयस्त्वशब्दः” इति प्रकर्षवाचित्वेन भूयःशब्दो व्याख्यातः । इतरद्वयानभिभूतशब्दत्वमेव भूयस्त्वमित्युपसकारकृताप्युक्तम् । इतरद्वयानभिभूतौ द्वि प्रकृष्टतया, प्रकर्षश्चाधिक्येन, तच्च चरकेणात्र विशेषशब्देनाभिहितम् । भूयस्त्वस्य शक्तत्वरूपार्थस्वीकारेऽपि चरकोक्तैर्नाल्पता, विभुत्वादिति तदुक्तं, तस्य च शक्तत्वादिति व्याख्यानोपलब्धेवेति । अत्र न्यायवैशेषिकाभ्यां समं चरकस्य विरोध इति कैश्चिदकाण्डतण्डवितपाणिडस्यैवैव जल्पितमिति प्रतिभाति । ग्रैवेन्द्रियैः प्रत्यक्षमुपलभ्यते तान्येव सगति चाप्रत्यक्षाणि (च. सू. अ. ७) “पञ्चकर्मलुमेयानि” (च. शा. १-२२) इतीन्द्रियाणामप्रत्यक्षताऽनुमेयता चोक्ता । ननु “तत्रैकं स्पर्शनमिन्द्रियाणामिन्द्रियव्यापकं चेतः समवायि” इत्येकमिन्द्रियं पूर्वञ्च पञ्चेन्द्रियाणीति परस्परविरोध इति चेन्न “महर्षिणा स्वयमसात्मेन्द्रियार्थसंयोग एक उक्तः । इन्द्रियाणि तु पञ्च । तथा च प्रतिनियतैः पञ्चमिन्द्रियात्मेन्द्रियार्थसंयोगैर्भाव्यं न च तथा । अस्य विरोधस्य परिजिहीर्षया स्पर्शनेन्द्रियस्य सर्वेन्द्रियव्यापकत्वं अभिवाय सर्वेन्द्रियानुगतं स्पर्शमर्थग्रहणकारणमेवरूप दर्शयति । ततश्च तस्यैकस्यासात्मेन्द्रियार्थेन संयोगादुपपन्न एक-रूपोऽसात्मेन्द्रियार्थसंयोगः ।” इति चक्रपाणिप्रतिपादितः समाधिरत्रानुसन्धेय इति । कैश्चिद्विदं चरकवचनं चक्रपाणिप्राल्लयानञ्चैकेन्द्रियवद्वरमेत्यभिधीयते तत्तु ग्रन्थरहस्याकलनाऽभावसंभवमिति नाऽऽदरणीयम् । तथाहि, नात्रैकमिन्द्रियं विधीयते परन्तु त्रिद्वितस्य स्पर्शनेन्द्रियस्य व्यापकत्वं विधीयते । व्याख्यातञ्चेतत्तयैव चक्रपाणिना “इन्द्रियाणामिति निर्धारणे षष्ठो, इन्द्रियाणि चक्षुःश्रोत्रादीनि व्याप्नोतीतीन्द्रियव्यापकम् । स्पर्शनं हि सर्वेन्द्रियेन्द्रियेव स्थि, अत एव स्पृष्टद्वैतार्थमिन्द्रियाण्यर्थं गृह्णाति । व्यापकश्चासौ स्पर्शश्चेति तेन कृतस्तद्विवन्धनः सर्वेन्द्रियाणां सावविशेषः स्वभावविशेषोऽर्थग्रहणकारणीभूतः स्पर्श इत्यर्थ इति । न चात्र स्पर्शनेतरेषामिन्द्रियाणां निषेधश्चरकस्य चक्रपाणेर्वाऽभिमतो दृश्यते ।

“स्पर्शनेन्द्रियसंस्पर्शः स्पर्शो मानस एव च । द्विविधः सुखदुःखानां वेदनानां प्रवर्तकः” इति द्विविधः स्पर्शः सुखदुःखप्रवर्तकत्वेनोक्तः, तच्चोपपादयितुं “नारमेन्द्रियमनोलुब्ध-
नोचरं कर्म वा विना सुखदुःखम्” इत्यात्मेन्द्रियमनोलुब्धविषयकर्माणीति षट् कारणान्युपन्यस्तानि । अत्र स्पर्शनेन्द्रियसंस्पर्श इत्यनेनेन्द्रियाणामर्थेन संबन्धे स्पर्शनेन्द्रियकृतं दर्शयति । चक्षुरादीन्यपि स्पृष्टमेवार्थं जानन्ति नास्पृष्टम् ; यदि ह्यस्पृष्टमेव चक्षुः श्रोत्रं घ्राणं वा गृह्णाति तदा विदूरस्थमपि गृह्णीयात्, न च गृह्णाति तस्मात्स्पृष्टैव विषयमिन्द्रियाणि प्रतिपद्यन्ते । मानसस्पर्शोऽपि चिन्त्यादिनाऽर्थेन समं सूक्ष्मेऽस्त्येव ; येन मनः किञ्चिदेव चिन्तयति न सर्वम्, तदुक्तं बृहज्जीवधर्यै “मनःषष्ठानामिन्द्रियाणां त्रीणि त्रीणि च विप्रकृष्टसन्निकृष्ट-
वृत्तीनि । मनः चक्षुः श्रोत्रं विप्रकृष्टवृत्तीनि । घ्राणं रसने रसमिति सन्निकृष्टवृत्तीनि तस्यैव स्पर्शनलक्षणमाहुः ।

सुखदुःखवेदनाऽधिष्ठानञ्च “वेदनानामधिष्ठानं मनो देहश्च सेन्द्रियः।” इति सेन्द्रियं समनःशरीरमभिहितम्। केशनखादीनामपि शरीरावयवत्वेन शरीरत्वात्तत्र वेदनानामनुभवस्याभावादतिव्याप्तिप्रसङ्गिनिवारिष्यन्नाह “केशलोमनखाम्राजमलद्रवगुणैर्निना” इति। ननु स्पर्शनेन्द्रियसंस्पर्शो मानसस्पर्शश्च वा केवलं दुःखकारणञ्चेन्न कोऽप्यसुखैर्भावैराकान्त उपलभ्येत; असुखकरस्पर्शं परिहरन्सुखप्रदस्पर्शमेवोपसवमानः उपलभ्यते च। तस्मात्कैनापि कारणान्तरेणात्र भाव्यं येनानभिलषितोऽपि दुःखस्पर्शो दृष्टादायाति इति। तच्च कर्म आह द्वि- “वशी तत्कुरुते कर्म यत्कृत्वा फलमश्नुते। वशी चेत्तः समाधत्ते वशी सर्वं निरस्यति” इति। न च कर्ता च कर्मपरतन्त्रश्चेति युक्तियुक्तम्, कर्तुः स्वातन्त्र्ये हि पुण्यापुण्यव्यवस्था सञ्जच्छेत्। परतन्त्रो यदि कर्ता येन प्रयुक्तः पुण्यपापे विदध्यात्तयोः शुभाशुभं फलञ्च तस्मिन् प्रयोक्तव्यमुच्येत। योऽर्धुं प्रयोक्तरीष वीराणां जयपराजयौ, तस्मात्कर्ता स्वतन्त्रो हि भवति। न च स्वातन्त्र्ये किमित्यसुखोदकं कर्म कुर्यादिति घट्टकटीप्रभातन्यायापात इति चेन्न, “उपधा हि परो हेतुर्दुःखदुःखाश्रयप्रदः।” इति तृष्णा च सर्वानर्थहेतुरित्युक्तम्। सा च न केवलं सुखप्राप्तिरूपा किन्तु दुःखपरिहाररूपापि। तदुक्तम् “इच्छाद्वेषात्मिका तृष्णा सुखदुःखात्प्रवर्तते। तृष्णा च सुखदुःखानां कारणं पुनरुच्यते॥ उपादत्ते हि सा भावान्वेदनाऽऽश्रयसंज्ञकान्॥” इति सुखदुःखजननी तृष्णा सुखदुःखे प्रसूयते। उक्तञ्च “तृष्णावर्धं जगत्सर्वं चक्रवर्परिवर्तते” इति। “काममय एवायं पुरुष इति स यथाकामो भवति तत्कुरुर्भवति यत्कुरुर्भवति तत्कर्म कुरुते यत्कर्म कुरुते तदभिसम्पद्यते” (बृहदारण्यकम्) इति। “एष ह्येव साधु कर्म कारयति तं यमेभ्यो लोकेभ्य उन्निनीषते। एष ह्येव साधु कर्म कारयति तं यमो निनीषते” (कौषी.) इति। “अज्ञो जन्तुरनीशोऽयमात्मनः सुखदुःखयोः। ईश्वरप्रेरितो गच्छेच्छुभं वा स्वर्गमेव वा।” इति श्रुतिस्मृतीरनुसृत्य जैरीश्वरपारतन्त्र्यं जगत उच्यते तैरपीश्वरस्य वैषम्यनैर्घृण्यनिराकरणाय, इष्टानिष्टप्राप्तिपरिहाराखिनो जीवात्मनो विहितनिषिद्धकर्मणि स्वातन्त्र्यं वीतरागस्येश्वरस्य च पूर्वपूर्वजन्तुकर्मापेक्षया जन्तून्धर्माधर्मयोः प्रवर्तयतो जीवकर्मपारतन्त्र्यमुरीकृतम्। एतच्च वेदान्तदर्शनद्वितीयाध्यायतृतीयपादे “परात् तच्छ्रुतेः” इत्यादिना परायत्ताधिकरणे—न्यायदर्शनचतुर्थाध्यायप्रथमाह्निके “ईश्वरः कारणं पुरुषकर्माफल्यदर्शनाद्” इत्यादिना विस्तरेण प्रतिपादितं तत्ततोऽवगन्तव्यम्।

“त्यागः सर्वोपधानाञ्च सुखदुःखव्यपोहकः॥

कोषकारो यथा ह्यंशुनोपादत्ते वधप्रदान्।

उपादत्ते तथार्थेभ्यस्तृष्णामज्ञः सदातुरः॥

यस्त्वन्निकल्पानर्थान्ज्ञो ज्ञात्वा तेभ्यो निवर्तते।

अनारम्भादसंयोगात्तं दुःखं नोपतिष्ठते॥ (च. शा. १)

इत्यादिना च भोगतृष्णा च सकलदुःखकारणमित्युक्तम्। अज्ञो हि रागद्वेषप्रयुक्तोऽनर्थरूपेभ्योऽर्थेभ्यः संसारदुःखगृहीतः परं परं लाभं लिप्समानः तृष्णां निखिलदुःखजननीमेवोपादत्ते, तृष्णया च प्रवर्तते, प्रवर्तमानश्च धर्माऽधर्मावुपादत्ते, धर्माऽधर्माभ्याञ्च दुःखाश्रयं शरीरमेवं तिलपीडकवत्परिवर्तमानो न मुच्यत इति। सर्वोपधात्यागात् न रागद्वेषाभ्यां क्वचित्प्रवर्तते, अप्रवर्तमानश्च न धर्माऽधर्मावुपादत्ते, एवमनागतधर्माऽधर्मोपरमो भवति। उपात्तधर्माऽधर्मयोस्तु रागद्वेषशून्योपभोगदेव क्षयः। तेन सर्वथा कर्मक्षयाद् दुःखशरीराभाव इति। तृष्णाया निखिलदुःखकारणत्वमुपपादयता प्रकटितं परमकारणत्वमज्ञानस्य, यच्च तृष्णाया अपि मूलमिति निश्चप्रचम्। अज्ञानमेवाऽविद्याशब्देन व्याहृतमाकरे ज्ञानमेव मुक्तिसाधनमित्यय-

मौलनिषदानां परमः सिद्धान्तः । “ब्रह्मवेद ब्रह्मैव भवति” (मुण्डक २-२-९) “ब्रह्मविदा-
प्नोति परम्” (तैत्तिरीय २-१०) “ये तद्विदुरमृतास्ते भवन्त्यथेतरे दुःखमेवापियन्ति ।”
(बृह. ४-४-१४) “आत्मानञ्चेद्विजानीयादयमस्मीति पुरुषः । किमिच्छन्कस्य कामाय शरीरमनु-
सञ्ज्वरेत् । (बृह. ४-४-१२) इति ज्ञानेनैव मुक्तिप्रतिपादनात् । कामनिवृत्तावेव ज्ञानोत्पत्तिः कामस्य ज्ञाननिवर्त्यत्वाच्च
श्रुतौ प्रतिपादितम् । तथाहि—“यदा सर्वे प्रमुच्यन्ते कामा येऽस्य हृदि भ्रिताः । अथ मर्त्योऽमृतो भवति,
अत्र ब्रह्म समश्नुते” (बृ. ४-४-७) इति । साङ्ख्ये अपि “ज्ञानेन चापवर्गो विपर्ययादिष्यते बन्धः
(सां. का. ४४) इत्यज्ञानेन बन्धं ज्ञानेन चापवर्गं “एवं तत्त्वाभ्यासाद्वास्मि न मे नाहमित्यपिशेषम् ।
अविपर्ययाद्विशुद्धं केवलमुत्पद्यते ज्ञानम्” (सां. का. ६४) इति ज्ञानलक्षणञ्च जगुः ।

वेदान्तिनश्च “अतस्मिंस्तदुद्बुद्धिरूपः स्मृतिरूपः परत्र पूर्वदृष्टावभासः, यथा शुकाविदं रजतमेवं-
लक्षणमध्यासं पण्डिता अविवेचि मन्यन्ते” “अनन्दा नाम ते लोका अन्वेन तमसाऽऽवृताः । तौस्ते प्रेत्याभिगच्छन्ति
अविद्वासोऽबुधा जनाः” इत्यविद्यैव संसारम्; “तद्विवेकेन वस्तुस्वरूपावधारणं विद्यामाहुः ।” “विद्ययाऽमृत-
मश्नुते” इति विद्ययाऽपवर्गमात्मनः “अहं ब्रह्मास्मि नेह नानास्ति किञ्चन” इत्यादिरूपमाहुः ।

यौगिकास्तु “अनित्याशुविदुःखानात्मसु नित्यशुचिसुखात्मख्यातिरविद्या” (यो. सू. २-५)
विपर्ययश्चाविद्यामूलम् । अविद्यादयश्च श्वित्तवृत्तिविशेषाः कर्माशयस्य, कर्माशयश्च जात्यायुर्भोगाणामित्येवं वृत्तिभिः
संस्काराः संस्कारैश्च वृत्तय इति संसारचक्रप्रवृत्तिः ।

तार्किकाश्च “प्रमाणप्रमेयसंशयप्रयोजनहृष्टान्तसिद्धान्तावयवतर्कनिर्णयवाद्भूतचित्तवृत्तिलज्जातिनिग्रह-
स्थानानां तत्त्वज्ञानाजिःश्रेयसम्” (न्या. सू. १-१-१) इति मोक्षमार्गं तत्प्रकारञ्च “दुःखप्रवृत्तिदोष-
मिथ्याज्ञानानामुत्तरोत्तरापाये तदनन्तरापायादपवर्गः ।” इत्यनेन प्रादर्शयन्

चरके तु “आत्मेन्द्रियमनोऽर्थानां सन्निकर्षात्प्रवर्तते । सुखदुःखम्” इति सुखदुःखोत्पत्तिमात्मेन्द्रियसहचरितस्य
मनसोऽर्थेन सम्बन्धे सत्येव भवतीत्युक्तम् । अन्यत्र च “रजस्तमोभ्यां युक्तस्य संयोगोऽयमनन्तवान्” । इति
रजस्तमोः कारणत्वमुक्तम् । “पुरुषो राशिसञ्ज्ञस्तु मोहेच्छाद्वेषकर्मजः” इतीतरत्र मोहेच्छादीनां कारणत्वमुक्त-
मिति विभिन्नकारणप्रतिपादकानीव वचनानि दृष्ट्वा न च व्यामोहमोहे निपतितव्यम् । गुणकर्तृत्वोक्तिस्तु
गुणगुणिनोरभेदोपचारात् । तत्रापि रजस्तमसी संसाररोगाद्यनिष्ठफलावायकत्वाद्गुणावपि दोषा-
वित्युच्येते । मोहेच्छादयश्च तयोर्विकाराः; “रजस्तमश्च मानसौ दोषौ तयोर्विकाराः कामक्रोवलोभमोहेन्द्र्या-
मानमदशोकचिन्तोद्वेगभयहर्षादयः” (च. वि. ६-५) इति चरकोक्तेः । “ताभ्यां निराकृताभ्यान्तु सख-
वृद्ध्या निवर्तते” (च. शा. १) “मोक्षो रजस्तमोऽभावाद् बलवत्कर्मसंक्षयात् । वियोगः सर्वसंयोगैरपुनर्भव उच्यते”
इति । वैशेषिकैरप्युक्तं “तदभावे संयोगाऽभावेऽप्रादुर्भावश्च मोक्षः” (वै. सू. ५-२-१८) इति रजस्तमोऽभावा-
त्कर्मक्षयान्मोक्ष उक्तः । तौ च ज्ञानसाध्यौ तेन ज्ञानसाध्यता मोक्षस्य स्फुटीभवति । तथाहि—“सर्वं कारणवद्दुःख-
मसं चानित्यमेव च । न चात्मकृतं तद्वि तत्र चोत्पद्यते स्वता ॥ यावच्चोत्पद्यते सत्या बुद्धिर्नैतदहं यथा ।
नैतन्ममेति विज्ञाय ज्ञः सर्वमतिवर्तते ॥” इति । योगस्य मोक्षोपायतां प्रकटयन्नाह, योगे मोक्षे च सर्वासं वेद-
नानामवर्तनम् । मोक्षे निवृत्तिर्निःशेषा योगो मोक्षप्रवर्तकः ॥” इति । सैष योगः “अनारम्भाद्वात्मस्थे मनसि स्थिरे ।
निवर्तते तदुभयं वक्षित्वरूपोपजायते । सशरीरस्य योगज्ञास्तं योगमृषयो विदुः ।” इत्युक्तः । वैशेषिकमूत्रेऽपि “तद-
नारम्भ आत्मस्थे मनसि स्थिरे शरीरस्य दुःखाभावः संयोगः (वै. सू. ५-२-१६) इत्युक्तलक्षणो बोध्यः ।

तत्रापि “शुद्धसत्त्वसमाधानात्”, “आवेशश्चेतसो ज्ञानमर्थानां छन्दतः क्रिया । इष्टिः श्रोत्रं स्मृतिः कान्ति-
रिष्टतश्चाप्यदर्शनम् । इत्यष्टविधमाख्यातं योगिनां बलमैश्वरम्” इत्युक्ताष्टविधैश्वर्यप्राप्तिर्भवतीत्युक्तं
तथापि तत्त्वस्मृतिमन्तरा न योगो नापि मोक्षस्तदुक्तम् “एतत्तदकमयनं मुक्तैर्मोक्षस्य दर्शितम् । तत्त्व-
स्मृतिबलं येन गता न पुनरागताः ॥ अयनं पुनराख्यातमेतद्योगस्य योगिभिः । सङ्ख्यातधर्मैः साङ्ख्यैश्च मुक्तैर्मोक्षस्य
वायनम् ॥” इति । तत्त्वस्मृतिश्च “स्मृतिः सत्सेवनाद्यैश्च धृम्यन्तैरुपजायते” इत्युक्तम् । तानि
सत्सेवनशीने चाह “सतमुपासनं सम्यगसतां परिवर्जनम् । व्रतचर्योपवासौ च नियमाश्च पृथग्विधाः ॥ धारणं
धर्मशास्त्राणां विज्ञानं विजने रतिः । विषयेश्वरतिर्मात्रे व्यवसायः परा वृत्तिः ॥” इति । तत्त्वस्मृतेश्च परिणाममाह
“कर्मणामुपरारम्भः कृतानां च परिक्षयः । दैवकर्मजननद्वारः संयोगे भयदर्शनम् ॥ मनोबुद्धिममाधानमर्थतत्त्व-
परीक्षणम् । तत्त्वस्मृतेरुपस्थानात्सर्वमेतत्प्रवर्तते ॥” इति “विपारं विरजः शान्तं परमक्षरमव्ययम् । अमृतं ब्रह्म
निर्वाणं पर्यायैः शान्तिरुच्यते ॥” इति ब्रह्मपर्यायाभिरुच्य “तस्मिंश्चरमपन्थासे समूलाः सर्ववेदनाः ।
सर्वज्ञज्ञानविज्ञाना निवृत्तिं यान्त्यशेषतः ॥ अनः परं ब्रह्मभूतो भूतात्मा नोपलभ्यते । निःसृतः सर्वभावेभ्यश्चिह्नं
यस्य न विद्यते ॥ ज्ञानं ब्रह्मविदाञ्चात्र नञ्ज्ञस्तज्ज्ञातुमर्हति ॥” इति मोक्षदशायां जीवामनो ब्रह्मभावः सर्व-
भावनिर्गुणरूपश्चोक्तः । सा चेयं विवेकमुक्तिः । जीवन्मुक्तदशायाश्च “लोके विततमात्मानं लोकचरामपि पश्यतः ।
परावरद्वयः शान्तिर्ज्ञानमूला न नश्यति ॥ पश्यतः सर्वभावानिह सर्ववस्थासु सर्वदा । ब्रह्मभूतस्य संयोगो न शुद्ध-
स्योपपद्यते ॥” इति सर्वभावान्सर्वावस्थासु पश्यतोऽपि ज्ञानमूला शान्तिर्न नश्यतीति सिद्धादितम् । उपनिषदप्रति-
पाद्येऽयमविकल आत्मैक्य प्रतिष्ठापनसिद्धान्तश्चरकस्योपनिषदत्वं प्रतिपादयतीति सर्वमवदातम् ।

दुःखकारणप्रस्तावे “धीधृतिस्मृतिस्त्रिंशः सम्प्राप्तिः कालकर्मणाश्च । अनात्म्यार्थागमश्चेति
ज्ञातव्या दुःखहेतवः ।” इति कारणान्युक्तानि । तत्रापि कर्मेव प्रधानम् । धीधृतिस्मृतित्रिंशः, कालप्रसप्तिः,
अनात्म्येन्द्रियार्थसंयोगश्च नाकारणं भवन्तीति वाच्यम् । कर्माधीनत्वात्तेषाम् । तदुक्तं जनपदोद्धवंसनीये
“वाटाद्रीनां भद्रैर्गुण्यमुत्पद्यते तस्य मूलमधर्मः, तन्मूलं वाऽयत्कर्म पूर्वकृतमिति । का “निर्दिष्टं देवशब्देन
कर्म यस्योर्देहिकम् । हेतुस्तदपि” इति देवशब्दवाच्यस्य फलोन्मुखस्य कर्मणः का गतत्वं स्वीकृतम् । “ना-
मुक्तं क्षीयते कर्म कल्पकोटिशतैरपि” इतीतरत्र प्रतिपादितः कर्मणो भोगादेव क्षयः । अथ च “नहि कर्म
महत्किञ्चित् फलं यस्य न भुज्यते” इत्यनेनाक्तः । न च कृतं कर्म तत्कालं फलप्रदं भवति । क्रियमाणं
पच्यमानं फलोन्मुखं फलप्रदमित्यवस्थाक्रमालुविधायित्वात्कर्मणः । तेन नैकेन जन्मना फलोपभोगः
किञ्चित्कर्म इहैव फलप्रदं, किञ्चित् जन्मान्तर इत्यपि व्यवस्थेयम् । कृतहानाऽकृताऽभ्यागमप्रसक्तिनिवृत्तये
पौर्वदैहिकं कर्मावश्यमभ्युपेयम् “अनेन देहेनानुपभोग्यफलाय कर्मणे देहान्तरश्च स्वीकर्तव्यम् । तदेतत्सर्वं
विमुद्ध्योक्तं जीवप्रस्तावे “अहङ्कारः फलं कर्म देहान्तरगतिः स्मृतिः” इति देहान्तरगतिश्च कर्माधीना कर्म
च पुरुषाधीनमिति प्रतिपादयताऽभ्यधाये “यथा स्वप्नात्मनाऽत्मानं सर्वः सर्वासु योनिषु । प्राणैस्तन्त्रयते प्राणी
न ह्यन्योऽस्त्यस्य तन्त्रकः” इति । न कोऽपि परमेश्वरादिनिर्होरीक्रियते यः कर्मानुरूपं देहादेहान्तरगतौ जन्तुं
तन्मयये किन्तु सः स्वयं निर्विकारोऽप्यनादेः सर्वसंयोगाश्चेवज्ञातां प्राप्तः कर्मानुरूपमुच्चावचां योनिमभिपश्यते
सत्सर्ववियोगाच्च विमुच्यते । यथा बृहदारण्यके—“ते ह स्म पुत्रैषणायाश्च वित्तैषणायाश्च लोकैषणायाश्च व्युत्थायाश्च
मिक्षाचर्यं चरन्ति” इत्येषणावयवमुक्तं तथात्रापि पाणैषणा वित्तैषणा परलोकैषणा इत्येषणात्रितयमुपक्षिप्तमुप-
लभ्यते । तत्रैषणात्रयप्रतिपादनपरः परलोकैषणां प्रति विचिकित्सां निरस्यन्पुनर्भवे प्रतितिष्ठापयिषुर्विस्तरणाद्वार्थः
“संशयश्चात्र कथं भविष्याम इत्यक्षुता न वेति । सत्येके प्रत्यक्षपराः परोक्षत्वात्पुनर्भवेत्यस्य नास्तिक्यमाश्रिताः
भवन्ति चागमप्रत्ययादेव पुनर्भवमिच्छन्ति” इत्युक्तं पूर्वेपक्षे निगमरिष्यन्प्रत्यक्षपरिहारमाह ।
“तत्र बुद्धिमाणास्तिक्यबुद्धिं जह्यात् विचिकिरिष्याच्च । प्रत्यक्षे ह्यल्पमल्पमप्रत्यक्षमस्ति यदागमानुमान-

युक्तिभिरुपलभ्यत' इति । ये स्वागमानुमानयुक्तीरुपेक्षमाणाः प्रत्यवतिष्ठन्ते तान्प्रति विद्यमानवस्तुनामप्य-
प्रत्यक्षहेतुनुदाहरति—“सताञ्च रूपानामतिसम्भिरुपादितविप्रकर्षादावरणात्करणदौर्बल्यान्मनोऽनवस्थानात्स्वमाना-
भिहारादभिभवदादिसौक्ष्म्याच्च प्रत्यक्षानुपलब्धिरिति” एत एव शब्दाः साङ्ख्यकारिकायां समान-
परिपाठ्या पठिता दृश्यन्ते । तथाहि—“अतिदूरात्समीप्यादिन्द्रियघातान्ननोऽनवस्थानात् । सौक्ष्म्याद्
व्यवधानादभिभवत्स्वमानाभिहाराच्च ।” इति । पातञ्जलमहाभाष्ये चैतेषां च संवाद इवावलोक्यते । “मातरं
पिताञ्चैके मन्यन्ते जन्मकारणम्” इति जन्मकारणत्वेन मातृपितृवादिनां मतमुपन्यस्य “आत्मा मातुः पितुर्वा यः
नोऽपत्यं यदि सञ्चरेत् । द्विविधं सञ्चरेन्मातुः पितुर्वा मरणं भवेत् ॥ निरन्तरं नावयवः कश्चित्सूक्ष्मस्य चारमनः”
इति खण्डितम् । ये तु षण्णां घातूनां स्वाभाविकं संयोगं वदन्ति तत्रापि कर्मकारणतां प्रकटयन्नाह—“त्रिधा-
त्स्वाभाविकं षण्णां घातूनां यत्स्वलक्षणम् । संयोगे च वियोगे च तेषां कर्मैव कारणम्” इति । “अनादिव्ये-
तनाघातोर्नैकगते परनिमित्तिः” इत्यात्मनोऽनादित्वेनैव परनिर्माणपक्षो निरस्तः ।

प्रमाणैश्चतुर्भिः पुनर्भवञ्च प्रतिष्ठापयितुं प्रवर्तमानः “धर्मद्वाराऽवहितैश्च व्यपगतरागद्वेष-
भयलोभमोहमानैर्ब्रह्मपरैरातैः कमविद्धिरनुपहतसत्त्वबुद्धिपचारैः पूर्वैः पूर्वतरैर्महर्षि-
मिदिव्यचक्षुर्मिहैष्टेपदेष्टः पुनर्भवः” इति आगमेन मातापित्रोर्ब्रह्मज्ञान्यपत्यानि तुल्य-
संभवानां वर्णस्वराकृतिसत्त्वबुद्धिभाष्यविशेषाः, प्रवरावरकुलजन्म, दास्यैश्वर्यम्, सुखासुखमायुः, आयुषो
नैषम्यभिहृकृतस्यावाप्तिः, अशिक्षेतानाञ्च रुदिरः सपानहासत्रासादीनां प्रवृत्तिः, लक्षणोत्पत्तिः कर्मसादृश्ये
फलविशेषः, मेवा क्वचित्कचित्कर्मण्यमेशा, जातिस्मरणमेहागवनमितश्चयुतानां, समदर्शने प्रियाऽप्रियत्वमिति
प्रत्यक्षेण; स्वकृतमपरिहायैमविनाशि पूर्वदैहिकं देवसंज्ञकमानुषन्धिकं कर्म तस्यैतत्फलमितश्चान्यद्भूविष्यती-
त्यनुमानेन, षड्वातुषमुदायाद्भजन्म, कृतस्य कर्मणः फलं नाकृतस्य नाकुरोत्पत्तिरबीजादिति युक्त्या;
एवं प्रमाणैश्चतुर्भिरुपदिश्य पुनर्भवं सदाचारपरायणैर्भाव्यमिति व्याजहार ।

मिलिन्दपण्हेनापि बीजात्फलं फलाच्च बीजमुदाहरणीकृतम्—इति ध्येयम् ।

कर्मकारणताप्रतिपादनपरेण वात्स्यायनेनाप्येतदुत्तरमेवाकम् । तथा हि—दृष्टा च जन्मव्यावृत्तिः
सत्त्वभित्तो निकृष्टाभिजन इति, प्रशस्तं निन्दितमिति, व्याधिबहुलमरोगमिति, समग्रं विकलमिति, पीडाबहुलं
सुखबहुलमिति, पुरुषातिशयलक्षणोपपन्नं विपरीतमिति, प्रशस्तलक्षणं निन्दितलक्षणमिति, पाण्डिन्द्रियं मृद्विन्द्रियमिति
सूक्ष्मश्च भेदोऽपरिमेयः । सोऽयं जन्मभेदः प्रत्यात्मनियतात्कर्मभेदादुपपद्यते इति । मिलिन्दपण्ठोऽपि “न सर्वे मनुष्याः
समानाः, केचिद्दीर्घायुषः, केचिदल्पायुषः; केचित्स्वस्थाः, केचिद्दुग्णाः, केचित्सुरूपाः, केचित्कुल्पाः, केचित्प्रबलाः,
केचिद्वबलाः, केचित्सधनाः, केचिर्धनतः, केचिदुत्कृष्टाभिजनाः, केचिन्निष्कृष्टाभिजनाः; केचिद् बुधाः केचिदबुधाः”
इत्याह । इत्येवमनुभूयमानं लोकवैचित्र्यं कर्मजन्यम् । “नन्वर्थापत्तिरिव स्याज्जगद्वैचित्र्यदर्शनात्” इति कुमारिलोऽपि-
पत्तिगम्यमाह । शङ्कराचार्यस्तु “जगद्वैचित्र्योपलब्धिश्च धर्माधर्मनिमित्तः संसारोऽनुमीयते इत्यनुमानगम्यमाह ।
अभिधर्मकैशकारः फलानुमेयमिति । कर्मजं लोकवैचित्र्यमिति इदंयमानजगद्वैचित्र्यं कर्मणोपपादयन्
महामातृकारोऽप्याह—“कर्मजन्तिबहू मन्त्यन्ते फलयोगं शुभाशुभम् ॥” (शां. २.२९) “कर्मजोऽयं पृथग्भावो द्वन्द्व-
युक्तो हि देहिनः” (शां. २.३९) “आत्मना विहितं दुःखमात्मना विहितं सुखम् । गर्भस्थस्यामुपादाय भुज्यते
पौर्बदेहिकम् ॥” (शां. १.७९) इति कर्मणैव सुखदुःखादिद्वन्द्वप्रादुर्भावमाह ।

अयं पुनर्जन्मवाद आस्तिकदर्शनैः समं जैनबौद्धदर्शनसाधारणः । अस्थिरं केवलं विज्ञान-
स्वप्नानुरूपमात्मानं स्वीकुर्वन्तो बौद्धा अपि कर्म पुनर्जन्मसाधनीकुर्वन्तीति महदाश्चर्यम् ।

गुणः (न्या. सू. १-१-१४) इति वैशेषिकगुणाश्चोभयत्र समानाः केवलं स्वस्वकमोल्लिखिताः । एते खादीनां नैसर्गिकगुणाः, सामान्यगुणास्तु 'तेषामेकगुणः पूर्वे गुणवृद्धिः परे परे । पूर्वः पूर्वगुणश्चैव कमशो गुणिषु स्मृताः' इत्युक्ताः । एतेनाऽऽकाशस्य शब्दो, वायुः शब्दस्पर्शौ, तेजसः शब्दस्पर्शरूपाणि, अपां शब्दस्पर्शरूपाः, क्षितेः शब्दस्पर्शरूपरसान्धाः, इयं गुणवृद्धिभूतान्तरानुप्रवेशजनिता साङ्ख्य-वेदान्तानुभाषिणी । न्यायवैशेषिकनये तु वादरादिषु शब्दास्वीकारः । एषु पञ्चभूतेषु मध्य आकाशं विभु आतिवादिकशरीरं "भूः श्वेतुभिः सहितः सुसूक्ष्मः" इत्याकाशोत्तरभूतचतुष्टयगमनवचनात् । तेषामसाधारण-लक्षणान्याह "स्वरश्चलोष्मत्वं भूः लघुत्वजलजन्तुः । आकाशस्याप्रतीचातो दृष्टं लिङ्गं यथाक्रमम् ॥" इति । उक्ताऽसाधारणवर्णां स्वगोन्द्रियगते चरतामाह — "लक्षणं सर्वमेवैतत्स्पर्शनेन्द्रियगोचरम् । स्पर्शनेन्द्रिय-क्षेत्रः स्पर्शो हि सर्वपर्ययः, इति । न चात्र तेषां कर्माकारालक्षणं कथं स्पर्शनेन्द्रियगोचरमेति वाच्यम् : स्पर्शाऽभावरूपस्यापि तस्य स्पर्शनेन्द्रियगोचरतन्निधमात् । येनेन्द्रियेण यद् गृह्यते तेन तद्वता जातिस्तदभावश्च गृह्यत इति । तदवाह "सर्ववैय" इति विवर्ययोऽभावः तेन सहितः स्पर्शोऽपि स्पर्शनेन्द्रियसंवेद्य इति ।

'सर्वं द्रव्यं पाञ्चभौतिकमस्मिन्नर्थे' इति "अन्योन्यानुप्रविष्टानि सर्वाण्येतानि निर्दिशेत् । स्वे स्वे द्रव्ये तु सर्वेषां व्यक्तं लक्षणमभ्यस्यते ॥" इत्युक्तेः सर्वस्यापि कार्यस्य पाञ्चभौतिकत्वस्वीकाराच्छान्तरपरिगृहीतः "त्रिभुतं त्रिभुतमेकैकां करवाणि" इति छान्दोग्योपनिषदुपष्टम्भो द्विधा विधाय चैकैकं चतुर्धा प्रथमं पुनः स्वस्वेतर-द्वितीयैशैयैर्जनापञ्च पञ्च ते । इत्युक्तः पञ्चीकरणप्रकारश्चात्रानुसन्धेय इति ।

कालविषये न बहुफलभ्यते केवलं "कालः पुनः परिणामः" (च. वि. ८-७६) "कालः पुनः संवत्सरः" (च. वि. ८-१२५) इति नाममात्रेण कीर्तनं दृश्यते । विविधविषये तु सुतरां मौनमालम्बितं वरककृता स्यादत्र सांख्यनये कालविशोस्तत्त्वान्तरत्वास्वीकारबीजम् । आत्मा मनः पूर्वं प्रपञ्चिते ।

"सार्था गुर्वादयो बुद्धिः प्रपञ्चान्ताः परादयः । गुणाः प्रोक्ताः" (च. सू. १-४९) इति संक्षेपेण गुणाः कथिताः । तत्र अर्थाः शब्दस्पर्शरूपरसगन्धाः पञ्च; तदुक्तं "अर्थाः शब्दादयो ज्ञेया गोचरा विषया गुणाः" (च. शा. १) इति । गुर्वादयः—"गुरु, लघु, शीत, उष्ण, स्निग्ध, रुक्ष, मन्द, तीक्ष्ण, स्थिर, सर, सृदु, कठिन, विशद, पिच्छिल, ऋक्ष, खर, स्थूल, सूक्ष्म, नान्द, द्रवाः विंशतिः" (च. सू. २५-३६) । बुद्धिर्ज्ञान-मिथ्येकः; अनेन स्मृतिचेतनाभूतयद्द्वारादीनां बुद्धिविशेषाणां ग्रहणम् । प्रपञ्चोऽन्ते येनान्ते "इच्छा द्वेषः पुत्रं दुःखं प्रयतनः" (च. गा. १) इति पञ्च, परं आदिर्येषान्ते "परापरत्वे युक्तिश्च संख्या संयोग एव च । विभागश्च युक्तस्त्वैव परिमाणमथापि वा । संस्कारोऽभ्यास इत्येते गुणाः प्रोक्ताः परादयः (च. सू. २६) इत्येवं सम्मिलिताः एकत्ववार्तिशब्दगुणा आयुर्वेदे महर्षिभिः प्रोक्ताः । चिन्त्यविचार्यादिर्मनोऽर्थोऽपीति योगीन्द्रनाथमिप्रायः, एवं च पञ्चरजस्तमसां मनोगुणानां धर्माधर्मयोः परिप्रदो न्याय्यः न च "सत्त्वादीनि द्रव्याणि न वैशेषिकाप्रणीः, भोगविभागवत्वात्, लघुत्वचलत्वगुरुत्वादिधर्मकस्याच्च, तेष्वत्र शास्त्रे श्रुत्यादौ च गुणशब्दः पुरुषोपकार-कत्वात्, पुरुषपशुबन्धकत्रिगुणात्मकमहदादिरज्जुनिर्मातृत्वाच्च प्रयुज्यते" इति साङ्ख्यप्रवचनभाष्ये वाचस्पतिमिश्रवचनात् द्रव्याणीति मन्तव्यम्, केवलं पञ्चविंशतितत्त्ववादिनां साङ्ख्यानां नये गुणमय्याः प्रकृतेः द्रव्यत्वेन स्वीकारोचित्यं, चतुर्विंशतितत्त्ववादिनामायुर्वेदाचार्याणां समये तु न प्रकृताः पृथगस्तिस्त्वेन द्रव्यत्वकल्पना-प्रादुर्भावः स्यात्, पुरुषस्य सगुणत्वस्वीकारेणैव तस्यागुणत्वनिर्वाहः । "सर्वं रजस्तमश्चेति त्रयः प्रोक्ता महागुणाः ॥" इति वाग्भटेन एतत् त्रयम् महागुणत्वेनोक्तम्, इन्दुना च सत्त्वं रजस्तमश्च तन्वे महागुणशब्दोक्ता इति व्याख्यातम् । अत्र तन्त्रविद्वान्तसङ्कीर्णतारादयः कस्यचिद् भ्रमजनकमिति सम्भामहे । तेषु सप्तविंशतिगुणाः केवलं पदार्थविज्ञानो-

पयुक्ताः, इतरे च द्रव्यगुणशास्त्रोपयुक्ताः “प्रयत्नादि कर्म चेष्टितमुच्यते” इत्येकं चलनात्मकं कर्म प्रोक्तम् । एतदेव परवर्तिभिः पञ्चधा विभक्तम् ।

“सामान्यमेकस्वरूपे विशेषस्तु पृथक्स्वरूपः । तुल्यार्थता हि सामान्यं विशेषस्तु विपर्ययः ॥” इत्येवं सामान्यविशेषयोर्लक्षणमभिधाय, तयोः “सर्वदा सर्वभावानां सामान्यं वृद्धिकारणम् । हासहेतुर्विशेषश्च ।” इति चिकित्सायामुपयोगमभीप्सता महर्षिणा दृष्टिभेदः स्वीकृतः । नमश्चायं ‘समवायोऽपृथग्भावो भूमादीनां गुणैर्मतः । सनित्यः ।” इति निरूपितः । अभावप्रपञ्चं पूर्वं न्यरूपयाम ।

परीक्ष्यते व्यवस्थाप्यते वस्तुस्वरूपमनया इति परीक्षा-प्रमाणानि, इति व्युत्पत्त्या परीक्षा च प्रमाणञ्चास्मिच्छास्त्रे पर्यायत्वेनोपात्ते । “द्विविधा तु खलु परीक्षा ज्ञानवताम् प्रत्यक्षमनुमानश्च” (च. वि. ८-८३) इति प्रत्यक्षा-नुमानरूपं प्रमाणद्वयमुक्तम् “त्रिविधा वा सहोपवेशेन” (च. वि. ४-५) इत्याप्तोपवेशेन सह प्रमाणत्रयमुक्तम् । “तस्य चतुर्विधा परीक्षा. आप्तोपदेशः प्रत्यक्षमनुमानं युक्तिश्चेति (च. सू. ११-१७) इति युक्तिसहितं प्रमाणचतुष्टयमुक्तम् न चैर्मिन्नचैर्द्वैविध्यत्रैविध्यञ्चातुर्विध्यञ्च परस्परविरुद्धं परीक्षाया उक्तमिति वाच्यम् । द्वैविध्ये हि ज्ञानवताम-भिकारः ज्ञानञ्च ज्ञायतेऽनेनेति व्युत्पत्त्याऽऽप्तोपदेश एव । “आप्तोपदेशरूपशास्त्रजनितज्ञानवतामिति” चक्रोक्तेः । पूर्वमाप्तोपदेशाज्ज्ञानं ततः प्रत्यक्षानुमानाभ्यां परीक्षोपपद्यते । “किं ह्यनुपदिष्टं पूर्वं यत्नत् प्रत्यक्षानुमानाभ्यां परीक्षमाणो विद्यात्” इति चक्रोक्तेश्च । तस्मात्पूर्वमपेक्षितेन ज्ञानेन द्वैविध्येऽपि त्रैविध्यमनायाससिद्धमिति न विरोधः । यच्च युक्तिसहितत्वेन प्रमाणवातुर्विध्यं तदपि षोडशविधायाः ऊहलक्षणायाः परमार्थतोऽप्रमाणभूतायाः प्रमाणसाहाय्येन व्यग्रिप्रमाणायामुक्तेः प्रायो लोकानां व्यवहारादिह प्रमाणत्वेनोक्तिः वस्तुतस्तद्वापरिपर्यायमन्तर्क एव सा । इति चक्रपाणिना तथा स्वयं महर्षिणाऽप्यनुमानं नाम तर्को युक्त्यपेक्षः इति तस्या अङ्गत्वेन स्वीकारात् “तत्रानुमानाङ्गदेदो दुष्कर इति नाद्रियामहे” इति चक्रोक्तेश्च

अक्षमक्षं प्रसीत्योत्पद्यत इति प्रत्यक्षमिति व्युत्पत्त्या ज्ञानेन्द्रियेण पदार्थस्य यत् साक्षात्स्थितं ज्ञानं भवति तत्प्रत्यक्षमित्यभिधीयते । इन्द्रियाणि चात्र घ्राणरसनवक्षुस्त्वक्श्रोत्रमनांसि षट् प्रशस्तोक्तान्येव । न च चरक इन्द्रियोपक्रमणीयेऽन्यत्र बहुत्र च मनोराहतानां पञ्चानामिन्द्रियोक्तेः पञ्चैवेन्द्रियाणीति वाच्यम् । भौतिकानां बाह्येन्द्रियाणां परिगणनपरैर्ययमुक्तिः न सर्वेन्द्रियावरोचिनी । “भौतिकानि चेन्द्रियाण्यायुर्वेदे वर्ण्यन्ते” इति सुश्रुतो-क्तेश्च । मनस्त्वाहंकारिकमेव “न चाप्यहंकारविकारदोषैः” इत्यवाहंकारविकृतित्वेन मनसो बोधात् । ननु मनस इन्द्रियत्वेनैव भौतिकार्थं सिद्धम् तच्च किमेति वार्यते । उच्यते “तथेन्द्रियार्थाः” इति वाक्यशेषात् । न च सुखादयो भौतिका इत्यापादयितुं सुशकं तथापि “भूतेभ्यो हि परं यस्मान्नास्ति विन्ता विकिरिते” इति प्रतिज्ञानु-राचाचिकित्सासौलभ्यार्थं मना भौतिकमभ्युपेयम्, इति ।

केवलमिन्द्रियाणां मनसश्च “आरमप्रत्यक्षाः सुखदुःखेच्छाद्वेषादयः शब्दादयश्चेन्द्रिय-प्रत्यक्षाः” इति विषयभेदाद्वाह्याभ्यन्तरत्वभेदाच्च पृथगुक्तिः । मनस इन्द्रियत्वमात्रेण भेदकाप्यीये मधुर-रसगन्धावे षट्त्रिंशद्विप्रसादन इति वचनेन स्वीकृतमेव । तच्च न केवलं ज्ञानेन्द्रियं न वा कर्मेन्द्रियं किन्त्वेकादशहिन्द्रियेषु मध्ये मन उभयात्मकम् । चक्षुरादीनां बाह्यदीनाञ्च मनोऽधिष्ठितानामेव विषयप्रवृत्तेः । “मनः पुरःसराणीन्द्रियाण्यर्थग्रहणसमर्थानि भवन्ति” (च. सू. ८-७) इति वचनात् । एतस्य प्रत्यक्षज्ञानस्य प्रक्रिया चरकेणैवमुक्ता— “आत्मेन्द्रियमनोऽर्थानां सन्निकर्षात्प्रवर्तते । व्यक्ता तदात्वे या बुद्धिः प्रत्यक्षं सा निरुच्यते ॥” (च. सू. ११-२०) शब्दस्पर्शरूपरसगन्धास्त्रिंशद्विप्रसादनमात्रेण चोत्रत्वक्चक्षुरसनघ्राणानां मनः-

षष्ठानामिन्द्रियाणां विषयाः । “पञ्चेन्द्रियार्थाः शब्दस्पर्शरूपरसगन्धाः, मनसश्चित्तमर्थः” इति चरके-
णोक्ताः । विषयेन्द्रियमेवेन षड्विधे प्रत्यक्षे श्रोत्रेणोत्पन्नं शब्दादिप्रत्यक्षं ध्रावणं, त्वचोत्पन्नं स्पर्शादिप्रत्यक्षं
स्वाचं, चक्षुषोत्पन्नं रूपादिप्रत्यक्षं चाक्षुषं, रसनेनोत्पन्नं रसादिप्रत्यक्षं रासनं, घ्राणेनोत्पन्नं गन्धादिप्रत्यक्षं
घ्राणजं, मनसोत्पन्नं सुखदुःखादिप्रत्यक्षं मानसमिति व्यपदिश्यते । तदुक्तम् “या यदिन्द्रिय-
माश्रित्य जन्तोर्बुद्धिः प्रवर्तते । याति सा तेन निर्देशं मनसा च मनोमया” इति । अत्र प्रत्यक्षज्ञान इन्द्रियार्थयोर्यः
सम्बन्धः स सन्निकर्षप्रदेनोच्यते । येनेन्द्रियेण यद् गृह्यते तेनेन्द्रियेण तद्वत्तत्त्वान्यं तदभावश्च गृह्यत इत्यनेन
नियमेन घटप्रत्यक्षे घटो घटगतं रूपं तत्र च समवेतं रूपत्वमित्यादीनि चक्षुषैव प्रत्यक्षीभवन्ति । तथापि तत्र
घटस्य द्रव्यत्वेन, रूपस्य गुणत्वेन, रूपत्वस्य च सामान्यत्वेन, विषयभेदात्तत्त्वप्रत्यक्षे चक्षुःसन्निकर्षो भिद्यते । स च
“संयोगाद् द्रव्यग्रहणं, संयुक्तसमवायाद् गुणभेदप्रतीतिः संयुक्तसमवेतसमवायाद् गुणत्वादिज्ञानम् । समवायाच्छब्द-
ग्रहणं समवेतसमवायाच्छब्दस्वग्रहणम् । सम्बद्धविशेषणतया चाभावग्रहणमिति षोढा सन्निकर्षो ज्ञेयः ।

प्रत्यक्षनिरूपणानन्तरं “प्रत्यक्षपूर्वम्” (च. सू. ११-२१) इत्यनेन प्रत्यक्षस्यानुमान-
कारणत्वमुक्तम् “अनुमानं नाम तर्को युक्त्यपेक्षः” (च. वि. ४-४) तर्कोऽत्राऽप्रत्यक्षं ज्ञानं युक्तिः सम्बन्धोऽविना-
भाव इत्यर्थः; तेनाविनाभावजं परोक्षज्ञानमनुमानमित्यर्थः (चक्रः) “दृष्ट्वा बीजाशकलं जातमिहैव सदृशं
बुधाः” इत्येवं बीजफलयोः कार्यकारणलक्षणां व्याप्तिं दर्शयति । एतस्याऽभिनयश्च यत्र यत्र सहकारि-
कारणान्तरजलकर्षणादियुक्तं बीजं तत्र तत्र फलमिति; इत्थं सामान्यतो लक्षितमनुमानं “पूर्ववत्
शेषवत् सामान्यतोदृष्टम्” इति त्रिषोक्तम्—“प्रत्यक्षपूर्वं त्रिविधं त्रिकालबानुमीयते” (च. सू. ११-२१)
त्रिविधमनुमानमाख्यातम् (सां का. ५) । “पूर्ववत् पूर्वं कारणं तद्वत् तल्लिङ्गम्”
(गौ. व.) । अत्र तदस्यास्तीति विहितो मतुप्रत्ययः । यथोक्तं “बीजात्फलमनागतम्” (च. सू. ११-२१) शेषवत्
शेषः कार्यं तद्वत् यथोक्तं “मैथुनं गर्भदर्शनात्” (च. सू. ११-२१) इति त्रिकालमित्यनेन त्रिकाल-
विषयत्वमनुमानस्य दर्शितं यथात्र धूमदर्शनाद्वह्नेरनुमानं वर्तमानकालिकं, गर्भदर्शनान्मैथुनानुमानं भूतकालिक-
मेवं बीजदर्शनात्फलानुमानं भविष्यत्कालिकं बोध्यम् ।

प्रतिज्ञास्थापनाख्यामवयवद्वयीमधिकृत्य चरकेण पञ्चावयवाश्चोक्ताः । तत्र “प्रतिज्ञा नाम
साध्यवचनम्” (च. वि. ८-३०) प्रतिज्ञातोऽर्थो हेत्वादिभिः स्थाप्यते तस्मात्ते स्थापनाया अवयवाः । “स्थापना
नाम तस्या एव प्रतिज्ञाया हेतुदृष्टान्तोपनयनिगमनैः स्थापना” (च. वि. ८-३१) “तत्र पूर्वं प्रतिज्ञा
पश्चात्स्थापना, किं ह्यप्रतिज्ञातं स्थापयिष्यतीति” (च. वि. ८-३१) चरकोक्तेः “हेतुर्नाम उपलब्धिकारणम्”
(च. वि. ८-३२) उपलब्धिकारणमिह प्रत्यक्षादिजत्वेन चतुर्विधम् । “तत्प्रत्यक्षं, अनुमानं, ऐतिह्यम्
औपम्यम् इत्येभिर्बहुपलभ्यते तत्त्वम्” (च. वि. ८) इति चरकोक्तेः ।

“दृष्टान्तो नाम यत्र मूर्खविदुषां बुद्धिसामान्यं यो बध्यं वर्णयति” (च. वि. ८-३४) “तद्वित्यम्-
नित्यः पुरुषः इति प्रतिज्ञा । हेतुः अकृतकत्वादिति । दृष्टान्तः यथा आकाशमिति । उपनयः—यथा च अकृतक-
माकाशं तच्च नित्यं तथा पुरुष इति । निगमनम् तस्मान्नित्यं इति” (च. वि. ८-३१)

आप्तोपदेशमुद्दिष्ट्याह चरकः—“तत्राप्तोपदेशो नाम आप्तवचनम् । आप्ता ह्यवितर्कस्मृतिविभागा-
विदो निष्प्रोत्युपतापदर्शिनश्च तेषामेवं गुणयोगाद्यद्वचनं तत्प्रमाणम् ।” (च. वि. ४-४)

“रजस्तमोभ्यां निर्मुक्तस्तपोज्ञानबलेन ये ।

येषां त्रिकालममलं ज्ञानमव्याहृतं सदा ॥

आप्ताः शिष्टा विबुद्धास्ते तेषां वाक्यमसंशयम् ।

सत्यं वक्ष्यन्ति ते कस्मादसत्यं नीरजस्तमाः ॥” च. सू. ११

आप्तोपदेशरूपप्रमाणशब्दो द्विविधः, परमाप्तब्रह्मादिप्रणीतो लौकिकाप्तप्रणीतश्च । तथा चोक्तम्—“तत्राप्तागमस्तावद्वेदः, यश्चान्योऽपि कश्चिद्वेदार्थाद्विपरीतः परीक्षकैः प्रणीतः शिष्टानुमतो लोकानुग्रहप्रवृत्तः शास्त्रवादः स च आप्तागमः” (च. सू. ११) इति । तथा “एतिह्यं नाम आप्तोपदेशो वेदादिः” (च. वि. ८-५१) इत्येवं ऐतिह्यशब्देन परमाप्तप्रणीत आप्तोपदेशोऽवबुद्धः, लौकिकाप्त-प्रणीतश्च शब्दैकदेशरूपः सत्यप्रकारविहितः । सत्यो नाम यथार्थभूतः “सन्त्यायुर्वेदोपदेशाः, सन्ति सिद्ध्यु-पायाः साध्यानां व्याधीनां, सन्त्यारम्भफलानीति” (च. वि. ८) उक्तंज्ञेयः । स पुनर्द्विविधो दृष्टार्थोऽदृष्टार्थ-श्चेति तत्र शब्दप्रमाणतदुपजीविप्रमाणतिरिक्तप्रमाणगम्यार्थोऽदृष्टार्थः । शब्दतदुपजीविप्रमाणगम्यार्थोऽदृष्टार्थः । यथाह चरकः “दृष्टार्थो नाम त्रिभिर्देतुभिर्दोषाः प्रकुप्यन्ति, षड्भिरुपक्रमैश्च प्रशाम्यन्ति, सति श्रोत्रादियद्भावे शब्दा-दिग्रहणम्, इति । अदृष्टार्थः पुनः—अस्त प्रेत्यभावः, अस्तिः मोक्ष इति” (च. वि. ८) युक्तिं लक्ष्येश्वरक आह—

बुद्धिः पश्यति या भावान्वहुकारणयोगजान् ।

युक्तिश्चिकित्सा सा ज्ञेया त्रिवर्गः साध्यते यया ॥ च. सू. ११

इति । इयञ्च युक्तिर्केशब्देन, ऊहशब्देन च तत्र तत्राभिहिता, न स्वतन्त्रं प्रमाणं केवलं सहायी-भूता सती प्रमाणमुपकरोति । तदुक्तम्—“जलकर्षणवीजर्तुसंयोगाच्छस्यसंभवः” युक्तिः । जलं, कर्षणं, वीजं, ऋतुः, एतेषां सर्वेषां संयोगादेव शस्योत्पत्तिः संभवति न त्वेकस्याप्यभावे—अर्थात्—शस्योत्पत्तौ जलादीनां समवेताना-मपेक्षा वर्तते न व्यस्तानाम्, तेन अत्र खलु जलादयः समवयन्ति तस्माच्छस्याभ्युत्पत्त्यन्तीति संभाव्यते इति यज्जानं तद्युक्तिशब्दाभिलष्यम् ।

शास्त्रवृत्तादावुपायान्प्रदर्शयेश्वरकैः अध्ययनमध्यापनं तद्विशसंभाषां च परिग्रहाह । तेषु तच्छास्त्राध्यायिना सह संभाषणं तद्विशसंभाषाशब्देन परिगृहीतम् । एतदेव न्यायसूत्रकृता “तद्विशेष सह संवादः” ४-२-४७ इति संवादशब्देनोक्तम् । द्विविधा तु खलु तद्विशसंभाषा भवति सन्वायसंभाषा, विगृह्यसंभाषा च, तत्र सन्वायसंभाषा नये संवाद इत्युच्यते । विगृह्यसंभाषा तु जल्पवितण्डारूपा ज्ञेया । चरकेण तु विगृह्यसंभाषा वादशब्देनोक्ता ।

छल-जाति-निग्रहस्थानानि गौतम इव विस्तरेण चरको न वर्णयामास किन्तु केन सह सन्वाय-संभाषा विधेया, केन सह वा विगृह्य, कथञ्च तत्र सम्भाष्यमित्यादिविशयश्चरकेण विस्तरेण युक्ति-युक्तश्च वर्णितः न तथा न्यायसूत्रभाष्ययोरुपलभ्यते, न्यायभाष्यकारो दार्शनिकविषयमुदाहरति चरकस्तु “अग्निं जरणशक्त्या, बलं व्यायामशक्त्या” इत्येवमायुर्वेदीयविषयमुदा-हरति । इत्येवं भेदोपलम्भेऽपि न्यायशास्त्रीया कथापद्धतिश्चरकीयसंभाषां बहुधाऽनुसरन्तीति दृश्यते । वादमार्ग-ज्ञानार्थं चरकेण वादः, द्रव्यं, गुणः, कर्म, सामान्यं, विशेषः, समवायः, प्रतिज्ञा, स्थापना, प्रतिष्ठापना, हेतुः, दृष्टान्तः, उपनयः, निगमनम्, सिद्धान्तः, शब्दः, प्रत्यक्षः, अनुमानं, ऐतिह्यम्, औपम्यम्, संशयः, प्रयोजनं, सव्यभिचारं, जिज्ञासा, व्यवसायः, अर्थप्राप्तिः, संभवः, अनुशोच्यम्, अननुशोच्यम्, अनुशोचः,

प्रत्यनुयोगः, वाक्यदोषः, वाक्यप्रशंसा, छलम्, अहेतुः, अतीतकालम्, उपालम्भः, परिहारः, प्रतिज्ञाहानिः, अभ्यनुज्ञा, हेत्वन्तरम्, अर्थान्तरम्, निग्रहस्थानम्, इति चतुश्चत्वारिंशत्पदान्युक्तानि । तत्र जल्पवितण्डे वाद्-भेदत्वेनोक्ते, द्रव्यगुणकर्मस्वामान्यविशेषसमवायाः वैशेषिकोक्ताः षट् पदार्था एवान्नोक्ताः । प्रतिज्ञा च न्यायानु-सारिणी, प्रतिज्ञां साधयितुं हेतुदृष्टान्तोपनयनिगमनानि नैय्याधिकरिवेदापि स्वीकृतानि केवलं-हेत्वाद्यवयव-चतुष्टयी स्थापनाशब्देनोच्यते इति भेदः नैयायिकानां प्रतिपक्ष एवात्र प्रतिष्ठापनाशब्देनोक्तः; जातिश्चोत्तरशब्देनोक्तः, परं नात्र चतुर्विंशतिभेदाः पठिताः; उदाहरणानि चायुर्वेदोपयोगीनि गृहीतानि; सर्वतन्त्रादिभेदचतुष्टयोपेतः सिद्धान्त-पदार्थः; शब्दः, प्रत्यक्षम्, अनुमानम्, ऐतैक्यम्, औपम्यम्, संशयः, प्रयोजनम्, एतानि न्यायोक्तान्येव । अनैकान्तिक-हेत्वाभासः स्वयमिच्चरशब्देन परीक्षा जिज्ञासाशब्देन, निर्गमश्च व्यवसायशब्देन, अर्थापत्तिश्च अर्थप्राप्तिशब्दे-नेदोक्ता, कारणं संभवप्रमाणञ्च संभवशब्देनोक्तम् । सदोषं वाक्यमनुयोज्यम्, विपरीतमनुयोज्यम्, प्रश्नः अनुयोगः, प्रतिप्रश्नः प्रत्यनुयोग इत्युक्तः । न्यूनाधिकानार्थकार्थक विरुद्धाख्याः पक्ष-वाक्यदोषा उक्ताः । तेष्वामाश्रित्वारो निग्रहस्थानोपात्ताः; विरुद्धश्च हेत्वाभासेनोक्तः; उक्तदोषपञ्चक-रहितं वाक्यं वाक्यप्रशंसाशब्देनाभिहितम्, वाक्छलं सामान्यच्छलमिति छलद्वयं दृश्यते; न्यायोक्तमुपचरं न गृहीतम् । प्रकरणप्रस-संशयसम-वर्ण्यसमाख्ययो हेत्वाभासा लक्षास्ते च प्रकरणसमसंख्याभिनार-प्राध्यक्षमस्थानीयाः । चरकीयोऽतीतकालो न्यायीयकालात्ययापदिष्टश्च भिन्नो । हेत्वाभासोद्धावनम्, उपालम्भः, तत्समाधानं परिहारः; प्रतिज्ञाहानिः, अभ्यनुज्ञा, हेत्वन्तरम्, अर्थान्तरम्, एतानि निग्रह-स्थानान्येव । तेषु मतानुज्ञा अभ्यनुज्ञाशब्देनोक्ता; निग्रहस्थानञ्चोभयत्र समानम् ।

इत्येवं नातिविस्तरेण चरकीयदर्शनपदार्थदर्शनं यथामति विहितं तद्गुणैकपक्षपातिनां सहृदय-धुरीणानां वाचकानां मनःप्रमोदमाध्यास्यतीति बलवती आशा । प्रार्थयामहे चान्ते गुणगृह्यान्विपश्चितोत्र-मानुषस्वभावसुलभममप्रमादादिदोषनिवर्त्य प्रमाज्यं तैः कलावद्भिक्षित्सकैः सफलीकृतस्वविशेषणैर्भाव्यमिति ।

त्रिदोषविज्ञानम् ।

THE SCIENCE OF THE TRIUMVIRATE OF PATHOGENESIS OR OF CONSTITUTIONAL PATHOLOGY

The Background

It is necessary to understand the background of the origin and growth of an idea or concept to be able to fully adjudge the degree of its validity. This is even more true in the case of a concept which relates to the working and maintenance of the life currents of the psycho-somatic constitution of man specially in the case of that concept which under the title of Tridoṣa (त्रिदोष) in India and under that of Hippocratic constitutional or humoral theory in the West has remained for centuries the central doctrine of health and disease. The meaning and interpretation of the terminology, having got degenerated and distorted during the long period of two thousand years, received a temporary setback during the dominance of the analytical age of localistic study of individual organs, tissues and cells.

But the recent evolution of microbiology, the progress of knowledge of nutrition and metabolism, the concept of integrative functioning of endocrine glands and the vegetative nervous system and the studies of allergy and immunity have revived the clinical interest in the study of constitutional or integrated or synthetic concept of the personality of man as a whole.

Arturo Castiglioni, the great medical historian, describing this modern revival of ancient constitutional concept as neo-Hippocratism says, "Such principles indicate the orientation of Modern Medicine toward a neo-Hippocratism (a term introduced by the author in 1925), return to some of the classical principles of medical thought. Modern medicine today turns to a dynamic, synthetic and unitarian direction after a period in which a morphologic, analytical, localistic tendency dominated. It is a return to the classical concepts of the ancient sage of Cos, focussed on the well-being of the individual and the improvement

of the race, seeking for the cause of the disease, its prevention and cure, both in the individual and in his environment. The study of the nature and the cause of disease is progressing more and more along the lines of an integrated physical, chemical, bacteriological, experimental and above all clinical methods, in which the study of economic and social conditions also are important. It is significant that the best type of clinician is learning and teaching how best to utilise all the weapons at hand in the laboratory as well as at the bedside to focus more efficiently on the one vital item, the study and treatment of the patient. The careful physician is convinced that no test, however important and decisive it may be, can take the place of a synthetic clinical opinion and the personal judgement of an intelligent and experienced clinician as to the condition of the patient and of the community."

At this juncture of an era of revival of the constitutional concept, not only in India but in the whole world, it will be certainly interesting and instructive to study the Tridoṣa doctrine. The Tridoṣa concept of Āyurveda is the earliest constitutional concept. Its germ can be seen even in the Ṛgveda but it was systematised and evolved as a scientific concept during the golden period of Āyurveda in India. If the true connotation of the terms in which such a concept is embodied is fully understood against the background of its origin and growth, much needless argumentation and opposition based on misunderstanding will be eliminated.

India, The Source

India is probably the source of the humoral theory of the Greeks and the Romans. Dr. Cyril Elwood M. D. in his book "Medicine in Persia" states that this doctrine "was taught in unmistakable terms in the holy books of the Hindus. From India it was carried to the Greeks by way of Persia."

Dr. George Draper M. D. in the book 'Human Constitution in Clinical Medicine' makes a similar statement. "Indeed in ancient India the school of Āyurvedic medicine gave instructions for evaluating a patient's nature. Later, in the medical disciplines of Persia

and still later in the teachings of Hippocrates, similar advice is given to the pupils of Aesculapius."

It is interesting to note that Castiglioni in the 'History of Medicine' declares while giving a resume of the Āyurvedic system, "The Āyurvedic system, according to those who have studied it carefully and appreciate its value, is important for its fundamental teaching. The theory of Tridoṣa is a kind of humoral doctrine which even today or perhaps especially today affords great interest for students. It affirms the existence of three Doṣas or essential principles which pervade all the tissues, secretions and excretions and determine health and disease."

The Triumvirate

For this reason the present attempt is confined to the providing of such a picture of the background, of the origin and gradual evolution of the concept of the triumvirate of pathogenesis i. e. of the Tridoṣa pathogenesis, the three determinants of pathogenetic and pathognomic phenomena comprising what is generally called Constitutional Pathology. These determinants of pathological variations, are in fact, when in a normal and well-balanced condition, the fundamental functionaries of the physiological state of the living organism. Harmonious working of these three functionaries is health and their discordance is disease.

Sir Michael Foster's remark, "the science of meteorology that cannot be divided into the science of good weather and the science of bad weather," can be aptly applied to the subject of health which cannot be divided in the science of good health and the science of bad health.

Claude Bernard, the great physiologist, believed in the unity of science of physiology and pathology. He began the course of his lectures with the explanation that there is only one physiology whose domain is the study of normal and pathological functions. In actual fact, his work was almost as much concerned with pathological physiology as with the normal physiology.

Thus the Tridoṣa is a concept of trinity of functional organisations applicable to and operative in both the realms of health and disease i. e. physiology and pathology of each and every form of life, from the ameba to man. Thus pathology becomes physiological in outlook enabling one to study disease conditions from the physiological point of view. The pathological processes are so co-ordinated with vital physiological processes that they can be interpreted in a common terminology.

The Origin of inquiry into Pathogenetics

It is but stating the obvious to say that all inquiry into the nature of phenomena starts from the latter's quality of opposition to the full and happy flow and expression of life. Pain and suffering, death and disease, fear and frustration arouse the spirit of inquiry and investigation in man. The philosophers of the Sāṅkhya school start their inquiry into the nature of life provoked by the presence of suffering.

दुःखत्रयान्निवातजिज्ञासा वदन्निवातके हेतोः ।

सां. का. १

"On account of affliction from the threefold misery, inquiry (should be instituted) into the means for its removal."

The Caraka Saṃhitā also ascribes, to the emergence of disease among men interfering with the fulfilment of the purposiveness of their lives, the effort of the sage-scholars in acquiring the right knowledge of disease and its remedial measures.

"Health is the supreme foundation of virtue, wealth, enjoyment and salvation. Now, diseases are the destroyers of health, of the good life and even of life itself. Thus has arisen the great impediment to the progress of humanity. What shall be the means of remedying it? Having observed thus they sat in meditation." (Car. Sūtra 1, 15-17). "He, the sage of great understanding soon learned correctly by single-minded devotion the whole science of life tribased and extending without end." (Car. Sūtra 1-25).

It is thus that distressed and goaded by pain and suffering,

physical and mental, the effort of inquiry started and bore fruit in the shape of the discovery of the three-fold determinants of all Physiological and Pathological processes of life.

Inquiry must be Adequate and Scientific

It is not enough if the effort of inquiry is merely sincere and intense in guaranteeing the correctness of the results. The method adopted must be sound, adequate, rational and consistent with the fundamental facts of the physical and biological laws of the universe. The first of such positively scientific efforts was made by the Sāṅkhya thinkers. They emphasised the necessity of scientific knowledge (विज्ञान) and the following verse from the Caraka Samhitā will ever remain the arch-apophorism as the guiding principle of all inquiry.

समग्रं दुःखमायत्तमविज्ञाने द्वायाश्रयम् ।

सुखं समग्रं विज्ञाने विमले च इतिष्ठितम् ॥ ८४ ॥

च. सू. ३०-८४

“The whole of suffering which cleaves to the mind and body has ignorance for its basis and conversely all happiness is founded in clear scientific knowledge.” (Sūtra 30, 84)

What is Science ?

From the various definitions and explanations given of science it becomes clear that science is in the method and not in the thing. Science is:-

1. “Any department of systematised knowledge”.
2. “A branch of study concerned with observation and with classification of facts specially with the establishment of verifiable general laws”.
3. “Accumulated knowledge systematised and formulated with reference to the discovery of general truths or the operation of general laws.”

These are some of the dictionary meanings of the word “Science”. In practical life and in the usage of common parlance too, we understand by scientific thought, speech or action, a systematic

process of evolution wherein each succeeding part is derived from its preceding part by the inevitable compulsion of logic and which relation such parts will maintain at any time or place, given the attendant circumstances.

Karl Pearson in his "Grammar of Science" states, "The man who classifies facts of any kind whatever, who sees their mutual relations and describes their sequences is applying the scientific method and is a man of science." Science, thus, is the critical systematic knowledge based on generalizations. It is an investigation into the nature of facts, facts not selected at random but in their comprehensive entirety. The scientist systematises the data, records the observations and draws conclusions therefrom which ultimately assume the form of a formula or a universal truth. He proceeds rationally and logically through all his investigations. It is the cumulative product of both the processes of analysis and synthesis, the knowledge of individual ideas and things against the background of universal laws and concepts.

The Totality of Knowledge

It is necessary again to remember that the totality of knowledge of things was aimed at by these ancient scientific thinkers. The understanding of any part merely in creation without the knowledge of the whole and the inter-relations of the parts was inadequate and liable to lead to wrong conclusions.

न हि ज्ञानावयवेन कृत्स्ने ज्ञेये ज्ञानमुत्पद्यते।

च. वि. ४-५

"The knowledge of the whole cannot accrue from the knowledge of merely a part." (Car. Vimāna 4-5)

The total concept led them to an all-comprehensive and synthetic method of study. The knowledge of the past was acquired but with special reference to the relation it bore to the whole i. e. to the present and the future. The knowledge of the parts was co-ordinated and placed in the proper perspective of the whole. They studied the nature of the whole in its entirety. This

concept led to the study of man as a whole, i. e. as complete unit.

1. The Study of Man as a whole

Man was studied in his whole personality which is the dynamic organization within the individual of those psycho-physical systems that determine his unique adjustment to his environment. This led to the study of his constitution i. e. that aggregate of inherited characteristics, which, modified by environment, determine the man's reaction to environmental factors.

2. The Study of the Universe for the discovery of all the Sources or factors of pain

The whole series of causes and sources of pain and suffering extending over the whole universe was included in the investigation.

- a. Totality of Man-cum-environment.
- b. Totality of environmental factors which become sources of pain or disease.
- c. Totality of methods of investigation which covered all aspects of time and space.
- d. Totality of things that were used as medication.

According to the Sāṅkhya view, all misery is of three kinds: viz.,

1. Internal=of the body-mind.
2. External=of the physical world.
3. Spiritual=from supernatural sources.

Suśruta further sub-divides these three categories into seven which will be described in detail later on in the section on Etiological factors.

Thus there remains nothing left uninvestigated in the universe, which can cause pain or suffering to man. It is an all-comprehensive classification.

3. The All-comprehensive method of Investigation

This method of investigation evolved a system which

encompassed all the possible states of time and space. Time whether present, past or future, and space whether near or remote as well as things visible or invisible normal or abnormal, were all made possible of study by this system of investigation.

एषा परीक्षा नास्त्यन्या यया सर्वं परीक्ष्यते ।

च. सू. ११-२६

"These are the methods of investigation, and there is no other left, which constitute the means by which all things are examined" (Car. Sūtra 11-26).

4. Totality of Things in the world used as Medication

The therapeutic science left no article or natural element un-used.

अनेनोपदेशेन नानौषधिभूतं जगति किञ्चिद्द्रव्यमुपलभ्यते ।

च. सू. २६-१२

"There is found in the world no substance that may not be used as medicine." (Car. Sūtra 26-12)

Thus to understand man, the subject of medical science, one has to understand not only the whole man but also the environment which begot and which sustains him and which is the cause of "ease" or "dis-ease" and which is also the source of medicaments. This environment therefore consists of the whole universe surrounding him.

The Need for Analysis

Thus the aim of the totality of knowledge required a very varied and extensive field of study for its attainment. It needed also some method of simplifying the study and classification or the analytic method became very necessary. This orderly arrangement and systematization gave some basic formula for generalization and a progressive field for research. The analytic process was carried on till the least common measure of classification was arrived at.

The Sāṅkhya classifies the universe into three categories: (1) the phenomenal physical world (व्यक्त), (2) the subtle or imperceptible world (अव्यक्त), and (3) the principle of spirit that underlies the manifold vital forms and activities (ज्ञ).

From Metaphysics to Science

The medical propounders took the aid of the classification of things as held by both the Sāṅkhya and the Vaiśeṣika schools, the latter enlisting the totality of things under the categories of Substance, Quality, Action, Generality, Particularity and Co-existence. From purely metaphysical methods Āyurveda passed on to the physical and experimental methods that physical categories and terms such as Substance, Quality and Action involve.

Ātreya reduces the universe to nine substances viz., the five proto-elements, the mind, the spirit, time and space. (Car. Sūtra 1-48)

खादीन्याद्या मनः कालो दिक्च द्रव्यसंग्रहः ॥ च. सू. १-४८

These combine to form the two main groups of things inanimate and animate.

All physical substances are reduced to the five categories of proto-elements and each proto-element is ascribed certain specific qualities, the total number of all the qualities coming to twenty in number. Thus the body-substance, environmental factors necessary for life-process, causative or curative factors of diseases—all these were reduced to a specific number of qualities whose use or avoidance could be prescribed in an arithmetical ratio.

As a result of the analytical process, they arrived at the conclusion that each substance or thing consisted of an aggregate of five inter-related systems each possessing quite different and specific qualities. These systems they termed proto-elements or महाभूत. The quality of each proto-element was determined and the manifestation of particular qualities of its specific grade or intensity in a substance depended upon the relative proportions of the proto-elements in that particular substance.

This formula of proto-elements served the purpose in dealing with the merely physical realities. But biological entities had two more factors to reckon with mind and spirit, which utilised and transformed physical matter to suit life's purposes. Both these are dynamic forces, and cannot be observed by physical means (अव्यक्तव्यक्तयोः). They are to be known by the effects they produce on the body and their nature is the object of inferential knowledge.

The combination of physical and vital forces in the biological world gave rise to the individuality of organic existence which needs special organizations to maintain the harmonious and coordinated working of both the physical and the vital systems of the organism. The organization of bodily constituents is the mark of all living creatures and it is in this that they differ especially from inanimate things.

The formula of physical matter cannot adequately explain the phenomena of the biological world which is characterized by organization. One is a static existence while the other is a dynamic creative process. Hence was felt the need to evolve the formula of biological function. All living organisms need minimum triple organization for their life processes.

1. The organization of fluid-balance of the body (water-balance system):-A specific fluid matrix is essential to full expression of life phenomena. This organization has to maintain the specific consistency and structure of the fluid matrix under the stress of varying environmental factors.

2. The organization of Thermal balance:-Specific heat is necessary to digest and assimilate material from the environmental world and convert it into one's own body-parts and also to maintain the optimal heat of the body for full expression of life phenomena.

3. The Organization of Vital balance:- Vital force is essential for the purpose of creative evolution, progress, power of organization and such other vital processes which characterize life and differentiate animate from inanimate things.

Specific Biological Terms

But as the physical body forms a part of the biological living organism, the physical formula has to be co-ordinated with and incorporated into this triumvirate of biological organizations to evolve a specific biological formula of the triad of Vāta, Pitta and Kapha. The five categories of physical matter are transformed into three by the method of earth and water being grouped into one, and air and ether being combined together, with the result that all the five physical proto-elements found place in the living organism being translated into the biological forces of Vāta, Pitta and Kapha, i. e., air and ether being combined into Vāta, fire turned into Pitta and water and earth combined into Kapha.

वायवाकाशवातुभ्यां वायुः । आग्नेयं पित्तम् । अम्लः पृथिवीभ्यां श्लेष्मा ॥

अ. सं. अ. २०, २

A specific terminology was evolved for this triumvirate of biological categories, which is significant both of static existence as well as dynamic force viz., of Kapha which signifies (by क=water) aqueous proto-element of the physical formula and which (by the addition of क=कृति इति) signifies the evolutionary process of biological formula. Thus the whole word कक gives the sense of the organization of fluid matrix wherein the biological process of the evolution of life is carried out. The synonym श्लेष्मा is even more significant of the biological process of cohesion denoting the colloidal matrix or milieu for the vital play.

Pitta derived from 'तप् to heat' is significant of the function of heat. Vāta is derived from 'वा to move' and is quite suggestive of dynamic or functional process.

Thus these thinkers were forced to analyse and classify the elements of the phenomenal universe and their direct and indirect products and their various modes and forms of combination in bringing about the substances and dualities and actions that the physical sciences and medicine particularly have to deal with as their subjects and also the biological organizations into which they were translated by the magic of the vital force.

This endeavour to analyse, re-group, classify and denominate

the physical and biological facts and laws heralded the usherance of medicine into the stage of a science.

The Characteristics of the Golden Age

The central theory of Āyurveda—the theory of the triumvirate of Vāta, Pitta and Kapha, is the product of an age which is universally regarded as the most brilliant in the long annals of man. This age which was marked by the most intense intellectual activity in the East as well as in the West, particularly in India and Greece, not only laid the foundations of thought on which the world has continued to build but has to its credit achievements which are still the crowning glory in art, literature, philosophy and medicine.

The age which in Greece threw up intellectual giants like Plato and Aristotle, Pythagoras and Hippocrates, was in India responsible for the rise of the seers of the Upaniṣads and of Āyurveda. Philosophy was at this time the supreme pursuit of the thinking man; and it was to the philosopher's counter that people came for the ultimate concepts of life. The arts and the sciences were, to be sure, actively cultivated; but they played a subservient role to philosophy, the undisputed queen in the realm of thought.

This meant that specialization was allowed but the final verdict did not lie with the specialist but with the general overseer, the philosopher, who alone was in a position to assess the value of the contributions made by the specialists. The result was the development of a co-ordinated outlook which studied the parts but which also studied them as forming the whole. It was this synthetic or integrated outlook which has given us the Tridoṣa concept of Āyurveda.

This view is based on the concept that any manifestation of life must involve the coming together of the three factors of the spirit, the mind and the body, the tripod on which the world is based.

This coming together or assemblage of spirit, mind and

body which we know as life, was studied both in its constituents and as a whole. The individual study of the parts gave rise to several special branches of study such as metaphysics, psychology and the physical or natural sciences; while the attempt to study the living conglomerate as a whole, became the special concern of the physician whose business it was to keep it a going concern and in perfect condition for as long as it was possible.

It was at this time when the physician occupied the exalted place, when medicine and metaphysics were equally the domain of the Vaidya—the man of knowledge, that the Ayurvedic classics came to be written by men who were admittedly the wisest of the age. Hippocrates says that the nearest thing to divinity is the physician who is also a philosopher. If this is so, who can deny that men like Ātreya and Dhanvantari are as near-gods as any that mortality can breed?

It is to these physician-philosophers of the golden age of India that we owe the concept of life as embodied in the Caraka and the Suśruta, a complete and integrated concept which is so broad-based that in its main outline it must hold good for all time. It is true that the perception of these sages could not claim the advantage of the elaborations due to mechanical devices that are possible today. But their integrated and total vision of the organism along with the *modus operandi* of its threefold organization and the means adopted to preserve and prolong its existence and functioning, is as supreme today in its validity as when it was first promulgated.

II. THE STORY OF LIFE

The Meaning of Life

The authors of Āyurveda, 'The science of life', intended by Āyurveda much more than mere skill of treatment or diagnosis of a disease condition. It meant for them the total concept of life which includes both man and his environment. The well-being of man, the aggregate of body, mind and soul, cannot be confined to mere physical health, but extends to that total sense of enjoyment of physical, mental and spiritual satisfaction and enrichment born

as a result of wholesome and mutually beneficial interaction between the individual and his environment, social, physical and spiritual. Man as a biological entity needs to adjust to the physical environment and as a social and spiritual entity needs to adjust and react wholesomely to the society in which he lives and to the spiritual ideal upheld by it. Such well-being alone is real and true of man in his entirety and such is the object of the "Science of Life." Caraka declares therefore—

हिताहितं सुखं दुःखमायुस्तस्य हिताहितम् ।

मानं च तद्वच यत्रोक्तमायुर्वेदः स उच्यते ॥ च. सू. १,४१

"That is named the science of life wherein are laid down the good and the bad life, the happy and the unhappy life, and what is wholesome and what is unwholesome in relation to life, as also the measure of life." (Car. Sūtra 1, 41)

Having visualised this total picture of life, we shall now discuss and analyse the two parts of it individually, viz., (1) The universe that forms the environment and which has given rise to life, and (2) The individual organization, its composition and structure and mode of functioning and its progressive evolution from ameba to man.

Life and the Triumvirate of Organizations

It is the belief of science with the evidence at its disposal that life is an incident in the history of the universe and is perhaps confined to this planet of ours where conditions favourable to its emergence, existence and growth began to obtain some millions of years ago. Science also expects life to disappear with the disappearance of these circumstances which disappearance is a certainty according to it in a few million more years.

From a purely common-sense point of view, it becomes difficult to understand that out of innumerable solar systems whirling about in space, whose volume is to be counted only in light years, that a tiny speck of a planet like ours should be the chosen or fortuitous haven or cradle of this mysterious phenomenon called life, while

the rest of the universe should be found inhospitable to it. Be it as it may, its history on our planet has been a most interesting one and a most tenacious and untiring struggle against the odds of ever-changing time and environment. It would seem from the opinion of science that life is alien altogether to the physical forces of the universe and can choose its habitation and its field of play and growth within very narrow limits of elemental geography.

At a particular stage in the history of our universe or solar system, the earth developed its present elemental geography, its present temperature, its contents of solid, liquid and gaseous matter, its mountains and earthy crust, its oceans, and its atmosphere of air. That hour in its history was the hour of lifting the curtain on the drama of life and ever since, life's unfoldment has gone on through the various stages of vegetable, animalcular, animal and human evolution. Till the human stage the urge of life has been an inner compulsion, blind, powerful and un-self-contemplative. Only the urge has been there instinctive like the powerful drive of the powder behind the lead in the bullet. But now, man stands surprised, wondering and self-contemplative; and the psyche in him demands the luxury of a reflecting mirror of thought, in which to contemplate her graces and the freedom to choose the direction in which to make her next step. Life from a mere green grain of moss and a speck of protoplasm has grown through the states of a floating jelly, the creeping reptile, the soaring bird, the unwieldy dinosaur and the half uplifted ape into the full stature of an upright standing man with his gaze scanning the mystery of the endless vistas of space and time and the colorful horizon where the earth meets the heavens in an everlasting nuptial clasp.

Briefly told, the story of life, more marvellous than a fairy tale is this. When on this planet there appeared the covering expanse of the rolling waters and a moving atmosphere that blanketed the earth and the oceans filling the inter-spaces between the earth and the sun, the first stage in the unfoldment of life began. The sun, the parent of this planetary system, pouring out his radiant energy upon the earth and its waters through the intermediate atmosphere

has given rise to the first forms of life and has sustained them in all their later stages of growth and evolution, and to this day remains the main source and sustenance of life. सूर्यं वात्मा जगत्सत्स्थुषश्च declares the Veda. "The sun is the soul of all things in the world, the mobile as well as the immobile." But the interplay of the solar radiations and the aquatic element of the earth and its ever-moving atmosphere has been essential for the maintenance of life in all its forms. While the sun was the impregnator, the field for impregnation was the waters of the ocean. It alone could receive the seed, and clothe it with the habiliment of life, with the form and structure needed for abiding and growth; and it is the field and scope for the vital dynamics of life unfolded gradually into cognition, conation, intellection and spiritual fulfilment.

Whether life is an exotic visitor waiting to make its entry on this planet till such a favourable moment when the optimal condition for its play was evolved, or is a peculiar offspring of such an accidental condition incidental in the history of stellar and planetary evolution or whether as described by the ancient Sāṅkhya seers, at the beginning of each cycle of time, the primordial principle of matter gets impelled into evolutionary activity of gradual unfoldment by a peculiar change in the eternal propinquity of the Puruṣa who is the unchanging witness of Nature (प्रकृति), it is not given to man to say with certitude.

Biocatalysis

Whatever be the origin of life whether extrinsic or intrinsic to matter, the distinguishing mark of all the forms of life has been the power of organization. Lovatt Evans in his work on "Starling's principles of human physiology" writes, "What are the fundamental phenomena which distinguish living things? Their distinctive feature is perhaps organization, and in the higher members this organization becomes more and more distinct. This greater complexity of organizations runs parallel with increasing range and power of adaptation, attained by the setting apart of special structures (organs) for the performance of definite functions." The peculiar characteristic of life is its power to organize its internal conditions both as regards structure and function so as to cope with its external conditions. Such

organization entitles it to the name of organic life. Such life-activity naturally involves a continuous maintenance of its body structure by means of periodic replenishment of the wear and tear, a constant supply of energy for maintaining the optimal temperature and tension and an unfailing mechanism for correlation of the distinctive functions of each limb of its complex structure so as to help the organism to react as a whole both in its internal and external movements. Such threefold organization is the *sine qua non* of all organisms however small or great.

All life or every organism is engaged continually in converting the matter of the outside world into a new pattern and texture that it may subserve the purpose of life. This transformation of matter into its own field of extension is the distinctive function of life. A recent writer Jerome Alexandar in his "Life, its nature and origin" declares that the distinguishing nature of life is bio-catalysis i.e. its power to bring about chemical change in bodies without practically undergoing any change itself. This bio-catalytic action is what enables life to maintain and extend its field of play in an alien world of matter. Life is continually annexing matter by its catalytic activity and extending its dominion over space-time. Life viewed from this point, is a catalytic struggle with the environment, a process of annexation into its expanding boundaries of the non-responsive and even hostile forces of the material world. This is a view which fully accords with that of the Sāṅkhya school of philosophy on which Āyurveda is based. The infinite number of Puruṣas, known as bions in modern biological language are caught up in the meshes of matter. In the presence of these bions, matter undergoes changes in order to give these life-units their play of life i.e. perpetual unfoldment of sensations, images and pain-pleasure conditions. But the Puruṣas remain unaffected and ever the same. Matter is like a danseuse who desires her charms to be witnessed by these bions called Puruṣas.

प्रकृतिं पश्यति पुरुषः प्रेक्षकवदवल्यितः स्वस्थः ।

सं. का. ६५

"The spirit, seated composed like a spectator perceives Nature."

Thus life's play involves a recasting of matter into new

patterns to suit the purpose of these bions while they themselves remain unchanged witnesses of varying life phenomena. The activity of these bions is indeed best illustrated by this process of bio-catalysis.

This biocatalytic process involves the threefold organization calculated to subserve the vital purposes of material upkeep and growth, maintenance of thermal and metabolic processes and the co-ordination of the internal and external movements suitably to the changes of environment. Without these threefold functions no organism can subsist. All processes of assimilation and dissimilation so essential to the upkeep of its structure and tone are rooted in such organizations.

It is therefore now our purpose to see how Āyurveda describes and fits into its general outline of life-processes this three-fold phenomenon of organization. Caraka lays down the distinction between organic and inorganic life thus:

सन्दिग्धं चेतनं द्रव्यं निरिन्द्रियमचेतनम् । च. सू. १, ४८

"The thing that is endowed with the sensory organization is organic or sentient and that which is not endowed thus is inorganic or non-sentient." (Car. Sūtra. 1, 48.)

The sentient organism involves a complex organization of structural, metabolic and kinetic processes. It also involves a mind or a co-ordinating principle however elementary or intricate it be. Such an organization, Āyurveda holds, to be universally obtaining in all forms of life, from the most rudimentary to the most complex. Thus its physiology and pathology is uniformly applied in the broadest outline to all forms of life.

Though life is mysterious and undefinable as a whole, the phenomena which signify the existence of life are evident for purposes of observation and study. All these phenomena viz., ingestion, assimilation, respiration, movement, growth, creative evolution, reproduction, death and last but not the least, the power of organization distinguish the animate from the inanimate.

Creative Evolution

Life has been observed, ever since its first appearance, to be endeavouring and struggling to create and preserve such optimal

environmental conditions for itself as would help its evolutionary purposiveness.

No doubt it reserves a margin for some variations in time and space. Besides, life has developed its own organization of existence, growth, perpetuation and expression so as to accord with such probable environmental variations, of course within certain limits; and has built up protective devices and technique for its survival and evolution. In the plant life we see the sap being encased in a hard case of bark-crust to protect it from the external heat and cold as well as from hostile incursions. Plant life is an example dominantly of the survival-technique of life's organization. In spite of the great size and strength developed, that form was not conducive to the varied richness of life-processes struggling for expression. Hence, life took a different direction for the release of those processes and devised subtler and more malleable patterns endowed with movement, agility and resourcefulness, for the preservation of its life and for overcoming hostile forces either by resistance or by accommodation. This is the animal pattern from the smallest animal to the complex organism of man with the mind-principle fully dominant and suggestive of a yet higher and more subtle element in life waiting to be released for its full assertion.

The process of such evolution is the direct result of the integrative organization which every living organism possesses and is able to evolve. The higher the type of life, the more subtle and distinct become these organizations. These organizations become more and more complex as evolution advances and form separate structures and special organs for the performance of definite functions.

But the fundamental principle of organizations which maintain the integration of the individual remains the same for all living organisms, whether minute or large. Even in unicellular life, all the fundamental phenomena of life are carried out in the same pattern though there is no differentiation in appearance or structure of the tiny speck of protoplasm. These fundamental phenomena are carried out by the following three integrative organizations of life.

1. Vital or motivating organization. This is the master organization which initiates and directs all activities and maintains the

specificity of all vital processes which characterize living organisms.

2. Physical or material organization is that which maintains the specificity of fluid matrix of protoplasm wherein life-phenomena are played.

3. Thermal or metabolic organization is that which maintains specificity of heat by carrying out anabolic and katabolic processes.

III. THE TRIUMVIRATE OF ORGANIZATIONS

The miraculous story of life's evolution or unfoldment is recorded by biologists and need not occupy us here beyond the recognition of the fact that the process of such evolution has always necessitated the pursuit of the technique of the threefold system of organizations viz., (1) the structural or material pattern, (2) the maintenance-device of the thermal optimum for metabolic functions and adjustment to environmental temperature, and (3) a kinetic or motivating organization of the entire structure for purposes of growth, perpetuation and enterprise. Without these forms of its dynamics, life could not have achieved its survival and progress. Let us now consider the full significance of the nature and texture of each of the three devices or organizations that have made for the survival and progressive growth of life.

I. The Matrix or Material organization

There is common ground between science and religion on the question of the primeval abode of life. The aqueous element has been known to be the first resort of life. Both vegetable as well as animal life-forms have been born and have dwelt in water before they grew into amphibious and terrestrial species. The seers of the Veda declare that the waters were there in the beginning. "आप एवेदमग्र आदुः" (Brihad. 5-5) From water, God created all living things on the earth. It is the faith of all religions that life-spirit dwelt and moved on the dark primeval waters. In Hindu mythology, the creative force Viṣṇu, lay for ages on the milky ocean, till one day it bestirred itself into a creative mood. In so many ways, the eye of intuition and revelation and that of science as well, have regarded water as the origin and the abode of life. वसः प्रवृत्ता जगतः प्रवृत्ती लोकेन जीवान् विसृजते भूम्भाम् । (Nārāyaṇa Upaniṣad 1-1)

The matrix of the material pattern that life requires for its abiding and play is provided by water and by none else of the elements of this universe. That is the medium best suited for the vibrant throb of life and for the transmission of its impulses. The body of man and of all plant and animal life is the material ocean on which floats the immaterial spirit of life. This fluid matrix can be poured into vessels of various shapes and its consistency increased or lessened. And life has attempted all those shapes, patterns and the densities needed for its consummate expression and for the release of the dormant spiritual force and the latest product of such life's enterprise is Man.

Like a spider that has woven its web and has retired into its centre, so has life woven around itself the web of the human organism with its automatic devices of circulation and respiration, its autonomous nervous system and a part of the mind mechanically operating its gears and clutches, leaving the higher life at the centre to contemplate and design its course of further evolution. Thus, there is a whole complex system distributed in its outline under this three-fold divisions of body-organization with the sole purpose of maintaining a uniform and unchanging environment for life, an environment that contains in itself its power of accommodation and adjustment to exogenous as well as endogenous interferences. (Homeostasis of Cannon). This leaves the higher mind of man free to reflect and weave out his patterns of thought for spiritual fulfilment and for his creative imagery in art, literature and science, all calculated to expand the scope and variety of life-expression. It is obvious that all the three aspects being component of an indivisible whole are vitally inter-related as integral parts, and changes in any one are bound to affect the rest. But for purposes of their specific knowledge the nature of each of these is to be referred to in terms of quantity or form, the degree of intensity and degree of tempo, respectively.

Modern anatomy and physiology have to their credit a long and persistent career of investigation and study of the human organism in all its complexity and minuteness and they have tracked down the secrets of the human structure and function to the microscopic cells and even beyond. It has, with great diligence,

experimented on lower animals and ascertained with approximating certainty the probable human reactions under given circumstances and to given stimuli: this is an essential part of the equipment needed to understand the details of human dynamics but it is by no means all and exhaustive. Man is more and greater than the mere sum total of his body-organizations or cells. In R. G. Hoskin's words: "Medicine is now in a transitional phase. The ineptitude of regarding a man as a mere collection of interesting organs is becoming increasingly clear. The personality of their possessor is more important than his organs no matter what fascinating pathological condition or secretory versatility they may disclose." There is, in the first place, an as yet inadequately understood factor of the psyche whose influence on the soma is gaining increasing recognition daily. There seem to be still greater factors as yet not understood, but whose workings are only dimly suspected and observed in crucial moments and special exigencies. Though their intrinsic nature and technique of functioning may defy our present powers of comprehension, yet their net effects are obvious to the discriminative eye. A good part of it is perhaps clear to the mind that is able to observe and appraise these influences from a viewpoint internal to the human organism, while to the clinician these are accessible through intelligent catechistic methods. This presupposes an extensive or inclusive and not an exclusive view of the structure and function of the individual parts of the body. The excellence or otherwise of each part is vitally related to that of every other part and the body as a whole. There is an intelligent and highly sensitive and adaptive principle to which all the body-functions and life-purposes converge and from which emanate the subtle and vital vibrations that uphold and preserve life both in health and disease. In a word, this presupposes a comprehensive or integrated concept of physiology, the doctrine of vitalism as against that of mechanism. For man is more than a machine; and over and above the psycho-somatic organization, there subsists presiding principle which is instinct with awareness and a wisdom beyond the conscious mind.

It may sound at first thought as if this doctrine of vitalism were a superfluity intruding into a realm where it were best not to

allow it. But on fuller consideration it would be seen that without a recognition of this element, there is a void and inadequacy, a scattered and disintegrated jumble that is belied by the fact of the universal subjective experience of men of an integrated and compact unity of personality. It is here that the beckoning hand of time points to the ancients, to Caraka and Suśruta of India and to Hippocrates of Greece and Galen of Rome. This is not to suggest that India and Greece have followed the same path. Far from it as we shall see. Nevertheless their inspiration was derived from a common viewpoint of regarding man as a whole and in the vital inter-relation of his various organs and of the extensive or inclusive nature of the functions of each of them in health and in disease.

These analytical results should be cast again into the mould of the synthetic or the integrative view of man. Instead of the data themselves being priced, their ultimate net values ought to be worked out and cherished. The affection or otherwise of each limb and part of the body has inevitable repercussions on the total well-being of the psycho-somatic whole which is man and vice versa. Once this is kept in mind, the natural corollary is to set about discovering the main springs of human well-being and reactions, the sources of living, action and growth as also of resisting disease and rebuilding of loss. Once the main springs of life and action are discovered, understood and assessed properly in their values, the rest follows easily and naturally. In the light of this radical knowledge of man, the data gathered assiduously about the various individual components of the body, big and small, get reoriented and yield a richer wealth of wisdom pertaining to the body as a whole as well as of its parts.

In the ancient medical thought of India, as we may find from Caraka, Suśruta and other works, this knowledge and observation of the main springs of human life and action and the full appraisalment of the functional values of life-expression, the full and detailed classification of the varied signs and symptoms, visible and expressed psychically and somatically of these main planks of life were all important. It was not mere theory. In practical therapeutics too, it was almost everything.

As we have already seen, they had grasped by observation and long study of human behaviour and reactions in health and disease, and also by general inference based on the understanding of the unity and uniformity of principles governing the cosmos as a whole and in its several parts, that man like the world around him was governed by a triumvirate of forces and elements well organized. The action of the sun, the waters and the vital air were the proto-types to them of the aqueous, thermal and kinetic organizations of the human body.

Water, as we have seen, was regarded as the source and sustainer of life, the daily purifier and refresher and the elixir of life. Water was held so sacred by most ancient races that it became a god and a religion grew about it. (Thales of Greece and the Seers of India). Holiness and purity were acquired through bathing and sipping; and water had to be poured as witness to gifts or vows made.

The counterpart in the body of the water in nature was the body-fluid, the colloidal fluid known as protoplasm. Of the triumvirate that governed the body this was the first essential. In a word this provided the very field for governance and was the substantial structure for the state itself. This is the material organization of the kingdom. This vital fluid forming the vehicle of the life-spirit contains proteins, fats, carbo-hydrates, vitamin and salt, and it constantly fluctuates to adjust to and counter internal as well as external disturbances. This integrative organization regulates constantly the physical and chemical structure of the body-fluid as well as its circulation. It maintains the proper balance between the fluids in the various parts of the body viz., the water bound in the colloidal system of protoplasm, the free water between the cells and fibres as well as the stored water in any water-depot of the body.

Temperature is an essential factor in the maintenance of this natural and uniform pattern and in providing it the scope for vital play; the body therefore is found to possess that mechanism of internal combustion, its heat-generating or thermal mechanism distributed and concentrated as the case may be, in the entire body.

This is a radical aspect and not an exclusive or limited

function and quality of any one limb or part of the organism. In the distribution of the function, it may be concentrated here and diffuse there but in its total aspect it balances the thermal production and output to maintain the thermal constant of the whole body. This bio-combustion process is termed the metabolic process. The internal thermal balance is sustained by the anabolic and catabolic processes taking place constantly in the body. Though this thermal element is diffused in the entire body it has also its regions or points of focus. These foci are important to the clinician, for the pathogenic and restorative processes are centred round these points of foci in particular and the entire system in a general way. These general foci are distributed in the body so as to meet the exigencies and functions of each structural system of the body. The Kapha, Pitta as well as Vāta, the three factors of the triumvirate that governs the psycho-somatic organism, are apportioned each its pentad of foci in the body. These, as has been already stated, have special clinical significance and are guides and aids in practical diagnostics and therapeutics.

We now come to the last and the most important factor of the triumvirate, the factor closest allied to the life-principle and which is the supreme and vital function of the psycho-somatic organization. Life is never static even in its most rudimentary states. Even simple existence presupposes an internal dynamics, where action, aspiration and adaptation to environment are involved, the dynamics are all the more complicated. Yet again, where the psyche is dominant and charges the body with the impulses of hope, despair, anticipation and fear and the desire for efficiency, for triumph over opposition and for the joy of achievement, the dynamic organization involving such kinesthetic force must be subtle, many-sided, self-sufficient and creative. This the body-mind does possess and is known as Vāta or Vāyu, 'Vā' meaning to move or convey.

The Kapha and the Pitta are relatively static and need at every point of their existence and functioning the co-ordinated impulse and motivation of Vāta.

पित्तः पंगुः कफः पंगुः पंगवो मलधातवः ।

वायुना यत्र नीयन्ते तत्र गच्छन्ति मेघवत् ॥

शाङ्ग. सू. ५, २५

“Pitta is lame and so is Kapha and so also the body-elements and the excretions. These, like a cloud, go wherever the Vāta (wind) carries them.”

Claude Bernard states that ‘vital force directs phenomena which it does not produce, and physical agencies produce (in living things) phenomena which they cannot direct. This apt remark of that great physiologist has much similarity with the statement of Kapila, the propounder of the school of Sāṅkhya.

पुरुषस्य दर्शनार्थं कैवल्यार्थं तथा प्रधानस्य ।

पञ्चबन्धवदुभयोरपि संयोगस्तत्कृतः सर्गः ॥ २१ ॥ सां. का.

“(The union) of the spirit (with the nature) is for the contemplation (of the Nature). (The union) of the Nature (with the spirit) is for liberation. The union of both (i. e. the spirit and the Nature) is like that of a lame man with a blind man. The creation is brought about by that (union).”

All life is dependent on Vāta, for, it is the up-bearer, impeller, sustainer and operator of life. It is known as the Tantra-Yantra-Dhara. In a chapter, classic in its pattern and expression, Caraka describes the nature and functions of Vāyu both in the cosmic as well as its biological aspects. It is the lord of the supreme principles of life. The salutary as well as the pathologic aspects of the Vāta principle are described by the royal sage Vāryovida in eloquent terms thus:

“The Vāta is the upholder of both, structure and function (in the body). It is the very self of the five forms of Vāta in the body viz. Prāṇa, Udāna, Samāna, Vyāna and Apāna. It is the impeller of upward and downward movements; the controller and conductor of the mind; the inspiritor of all the senses; the conveyer of all the sense stimuli, the marshalier of the body-elements; the synthesizing principle in the body; the impeller of speech; the cause of feeling and audition; the source of the auditory and tactile senses; the origin of all excitement

and animation; the stimulator of the gastric fire; the desiccator of the morbid vitia; the eliminator of excrement and deobstruent of the gross and subtle body-channels; the modeller of the fetal form; the sustaining principle of life—all these are the functions of the normal Vāta in the body.

When however, the Vāta becomes abnormal in the body, it afflicts the organism with diverse kinds of disorders, tending to impair its strength, complexion, well-being and life; it depresses the mind; impairs all the senses; destroys the fetus in uterus, produces deformity in it, or unduly prolongs the period of gestation; gives rise to fear, grief, stupefaction, depression of the spirits and delirium, and obstructs the vital functions.”. (Car. Sūtra 12-8)

It is necessary at this stage to remind ourselves that the science of physiology has passed through several stages of evolution. It was first a static view of the individual and of specific functions of the various organs and tissues of the body. Later it was realised that there was an integrative control through the nervous system and the psychic influences and that these parts could not be regarded as functioning separately. Yet again the endocrine secretions opened up newer processes of physiologic and metabolic conditions, having integrative chemical control on the body and new light was thrown on the cellular structure and function. We now know that no one part of limb or gland or cell of the body can be viewed unrelated to the rest of the psycho-somatic whole. One kind of secretion is balanced by another and the glands, the tissues, cells and all the other elements are inter-related and controlled by the fulcrum of personality on which the whole organism is fixed. Thus physiology is a total and integrated life-process and though viewed analytically for study-purposes, the comprehensive constitutional view must never be ignored. This triumvirate of Kapha, Pitta and Vāta form the general outline of that constitutional pattern or scheme; and all constructive, integrative, assimilative, recuperative and eliminative processes are to be understood in terms of the nature and working of these three principles as an integrated whole. They are all inclusive and complete in their comprehension of the body-mind processes as a whole. Time and space

factors vary every moment and hence it is not possible to maintain optimal environmental condition; hence life develops within itself such active organization as can enable the body to adjust immediately and adapt to the variation in the external relation. Moreover life evolves a special protective and survival technique to counteract the inimical environmental incursions.

The Three States of Life functioning in Men

We know all animate life to exist and grow in three different forms; the stationary life of plants, the mobile but instinctive and more or less passive and reflex life of the animal and the discursive, active and creative life of the human. The human body evolved as it is from the most rudimentary life, contains the vital processes of all these three types of life. It contains parts and organs that grow, abide and function like the plants, absorbing food, turning it into energy and discharging the waste products and automatically maintaining the basic body-life uninterfered and unaided by the higher aspect of the mind generally. From birth to death the heart, the stomach and the intestines, the liver and other glands go on functioning in their own autonomous nature without constant active impulsion or inhibition from the mind. Nature has managed to keep generally this basic body-mechanism beyond the ordinary man's reach and control.

Then there is the reflex life of man wherein the limb and sense organs execute purposive or protective movements in response to the external stimuli and in defence of the body-life against extraneous incursions and interferences. Much of the normal man's physical activity and mental and emotional impulses are reflexes and therefore a passive reaction to the external world of stimuli in multifarious forms. This is the part of animal life in man.

Above these two forms of life stands the real *human* life i. e. the purposive, creative and self-conscious propulsion of the higher mind. It is in the function of the higher mind and the translation into action by deliberate effort that man rises to and asserts his

essential humanity. This is the life of the psyche bringing up into play will, determination and discrimination.

Life has so managed to construct man that the basic survival functions are placed normally beyond the control of the individual himself and are an autonomous set of organizations. Thus man's survival is assured even as against himself. This organization is known as the autonomous or vegetative nervous systems including as it does the functioning of the heart, the liver, the intestines and such other vital organs. These organs have an independent functioning of their own and continue to work, given suitable environment, even outside the human body. Thus they represent in man the most primary life-forms of unicellular life, which is the unit of life. The reflex organization controlled by the central nervous system represents the next higher stage of man's evolution as an animal which reacts suitably to environment, and acts and learns by adjusting to external stimuli. This is the animal aspect of man. It is a passive activity in response to the environment. The full psychic life where the creative forces of his imagination and reason come into play and launch man's life upon the vast ocean of creative activity, discovering new factors and shaping the environment to this inner impulses, is the fullest expression of man on the *human* plane.

Thus a human being is effected and expresses himself in all these three aspects of his life while in health as well as in disease. For us who are concerned with man's pathological manifestations, the varied changes and symptoms that are manifested in these three aspects of man are very important for purposes of diagnosis and treatment. The most sensitive apparatus in him being the psyche in him, such internal symptoms as malaise, mental images and modes, dreams, desires and impulses form the material on which to base our appraisement of a situation. These factors are accessible to the physician only through close questioning and conversation with the patient and presuppose a certain degree of observation, introspection and intelligence on the part of the patient himself. In the absence of these factors, the proper appraisement of a disease condition in its early state is difficult. Thus the psychic disturbances

serve as the earliest symptoms that can guide the physician in the diagnosis of a disease condition.

The next stage of diagnosis is referable to the vegetative aspect of our body-organization. Since these functions are mainly independent of the mind and the central nervous system, they evince individual and automatic reactions to disease-affection and try to make suitable adjustments with it. This will be manifest in the form of instinctive inclinations for or against certain tastes, things, articles of diet, heat and cold in order to correct the decrease or increase of a particular structure or function in the body.

These two groups of symptoms, psychic modifications and instinctive inclinations are really the prodromal or premonitory symptoms helpful in early diagnosis of the disturbance of health. The study of premonitory symptoms has been given a great importance in Āyurveda and forms an important category in the pentad of diagnostic methods.

IV. THE STUDY OF ENVIRONMENT

Life and Environment

The understanding of the nature and function of life involves the study and the appreciation of the factor of environment. Indeed the two are one, like the two sides of a coin. To think of life apart from an environment is as impossible as to think of light without its surrounding sphere of illumination.

For the medical science particularly, life goes always with its environment. Every organism and specially man must be understood always in relation to his environment, for all his life-functions are engrossed in a continual flux to meet the challenge or reap the benefit of the factors of environment in the various forms of weather, geographical conditions, nature of soil, social tendencies, bacterial saturation and similar other conditions. In fact the play of life of any organism consists in its reactions to a given or changing environment. Environment is its prime cause of being, as also of its disorders and perfection. Caraka expresses this truth as a philosophical

axiom, that the existence of all beings is derived from the nature of their reaction to environment.

सर्वेषामेव भावानां भावाभावौ नान्तरेण योगयोगातिवोगनिध्यायोगान् समुपकम्बेते;
यथास्वयुक्त्यपेक्षिणौ हि भावाभावौ ॥४४॥

च. सू. ११-४४

"The continued existence or otherwise of all creatures is dependent on the proper, inadequate, excessive or wrong interaction between them and their environmental factors. For well-being and ill-being or existence and non-existence are dependent on the right degree and nature of contact with environment." (Car. Sūtra 11-44)

Thus in the medical science "Man-cum-Environment" is the unit of study.

As we have noted, life is not a static condition but a dynamic process of continual adjustment with environment. Time and space which constitute the environment, are perpetually varying factors of the universe which necessitate the constant vigilance, activity and modification in the reactions of the organism. Caraka therefore uses the various synonyms of life such as *नित्यगः* and *अनुबन्धः* denoting the constant changing, dynamic and progressive nature of life.

Disease factors of Environment

When the organism has failed to adjust or adapt owing either to some innate deficiency or to the overwhelming force of the environment, the resultant is disease-condition which is the subject matter of medicine. Such environmental factors are known as exogenous disease factors. They are of the nature of space and time which include varying places and positions of things and seasonal variations as well as physical, chemical and biological invasions.

In a great measure the organism can be taught to adjust to and prepare against such hostile forces. All those wholesome practices of diet and behaviour and seasonal regimen that are entitled "wholesome" life (*स्वस्थ्यश्च*) in the texts of *Ayurveda* are calculated to help the organism to adjust to and overcome these impediments to health from changing environment. This is a lesson in acquiring immunity

against probable antagonistic features of time and space.

Guiding factor in Adaptation

The above is true only in a general sense, for we find that reaction to environment is so different from one individual to another. No two people are the same in looks, tastes and degree of tolerance to heat and cold. Consequently the degrees of their individual adjustment and adaptive reaction must be different and in helping to bring about similar results, varying methods and degrees of effort have to be pursued. On what does this difference depend? What is the guide in determining the different degree and quality? What causes have brought about these differences in reaction to a common environment? In answer to these questions we stumble upon the central truth of the medical science i. e. individual constitution (व्यक्ति). Complete adjustment of the individual with his environment is possible only on the basis and appreciation of the facts of his individual constitution. It is only by viewing environment and constitution together that we can accomplish the complete and successful harmonization of man with his environment, which is the sole aim and justification of medicine.

V. THE STUDY OF CONSTITUTION

The outstanding fact of life is that no two individuals are exactly alike either in appearance or physical and mental aptitudes, abilities and gifts. This is because each person occupies a point in space-time different from that of every one else. This endows on each person at the very moment of his coming into being, a peculiar group of qualities and tendencies through the 'genes'. Each person thus enters into life with a peculiar view-point, mode of reaction to environment and susceptibility to physical and psychic influences. That is why we find that though people live in a common environment no two of them react in identical fashion. The great physician Osler says, "No two persons react equally to incursion of injury. No two persons suffering from the same disease run exactly similar clinical courses". All this emphasizes the supreme importance of the knowledge of individual constitution in medicine.

It is difficult to say at the present stage of human knowledge, how and what factors go into the making of this unique bundle of tendencies and qualities, why certain ancestral and race traits get to be recessive in one child and dominant in another. But that such is the case is evident from the investigations of Mendel and other scientists who have tried to reduce the subject into a biological law.

Classification of Types

If one is over-scrupulous in statement there are as many types as there are individuals. But that is unhelpful in reducing the subject to some approximate formula. Therefore some biologists and medical scientists have classified these types, racewise, groupwise regionwise and in some other ways. But the inadequacy of these classifications becomes evident from the medical clinician's point of view when individuals of the same race, group or region show divergent reactions and degrees of tolerance to common disease-factors. Hence a totally biological classification and grouping alone is entitled to the clinician's credence and appreciation.

In the ancient pathology of India and to an approximate degree in that of ancient Greece, such a biological view and classification do obtain. In India *प्रकृति* or constitution has been broadly classified into three groups allowing of innumerable minor groupings according to the varied combinations of these three main categories. This classification was done both from the physiological and pathological points of view, in the light of the triumvirate of biological organizations. This classification became the guiding spirit of the clinician and the patient in the maintenance of positive health and in prophylactic as well as curative measures of disease. It was also the beacon light in the realm of diagnostics and practical therapeutics.

In the daily regimen of diet and behaviour meant for balancing and correcting the predisposing factors of disease, this constitutional perspective was considered of supreme significance. Caraka says, 'विपरीतगुणस्तेषां स्वस्वभूतेर्विविधिनः । (त्र. सू. ७-४१.) A practice of things antagonistic in effect to one's predisposing factors, is recommended in the whole, some living'. (Car. Sūtra 7-41). This contains the beginnings of the

science of immunity in its active aspect where the individual is enabled to react powerfully with all his vital power of resistance.

The term "constitution" is used in physiology nearly in the same sense as in sociology wherein it is defined as the fundamental law according to which the government of a state is organized and the relations of individuals with society as a whole are regulated. This regulation is accomplished by the legislature, the administration and the judiciary, all of them cooperating with and dependent on each other. Thus it is with the integrated physiology. The millions of body-cells, the nervous system, the heart, the lungs and the intestines, all act in a coalition-government and mutually impel and check and balance and produce an integrated and harmonised result that is life and good health. Āyurveda depicts this integrated function in terms of the triumvirate of biological organizations and their mutual interaction.

Prakriti or Constitution in Ayurveda

Constitution is called Prakṛti in Ayurveda. It is the sum total of the crystallized results of all the influences of time and space on individual human life. It is easy to see that since no two individuals can occupy the same point in this time-space world, no two individuals are identical in all respects. It is now for us to understand the various factors that constitute this time-space in order to ascertain and define its variable influences on constitutions, as also the multiple of its types.

'Space' connotes the geographical and climatic conditions of the region of the individual's residence and all the characteristics of the social and physical environment of the man; while "time" refers to the age of the individual, the seasonal characteristics and the sum total of the influences from the inception of the man commencing from the moment of impregnation of the mother's ovum or even much earlier. The germ-cell contains the tendencies developed through all previous incarnations and thus is traced ultimately to the very beginning of time.

It is common knowledge now that the fetus undergoes all the evolutionary metamorphoses of its biological ancestry in the uterus before it emerges as a full-fledged human. Thus the whole experience of the species is in the germ-cell. This is known as शुक्रशोणितप्रकृति—genes. The peculiar influence inherited from both the parents and the combination of the formative forces, such as climate, season and environment, obtaining at the time of impregnation—all these, go to shape the constitutional destiny of the individual. The inheritance of previous incarnations, being subtle, is psychic, but they in turn have their influence on the somatic reactions. Thus at birth, a whole world of influences has already been at work in giving the individual a definite predisposition, a definite pattern of tendencies set in motion, which determines his or her degree of tolerance and resistance to external and internal disease factors. The varying effects of climate on the gravida and her habits and tendencies and social and seasonal environment are bound to have profound consequences (कालगर्भाशयप्रकृति and मातुराहारविहारप्रकृति). Thus at the very moment of birth, the individual is a complex being, a bundle of tendencies bearing the seal of destiny, with of course, a margin for freedom of will and action.

Constitution is an inherited or genotypical condition, that cannot be altered fundamentally and is a life-long concern and of supreme significance in determining the conditions of health and disease in man. This is well expressed in the following verses of Caraka and Suśruta.

समपित्तानिलकफाः केचिद्भ्रमादि मानवाः ।

इदं यन्ने वातकाः केचित्पित्तकाः श्लेष्मलास्तथा ॥ ३९ ॥

तेषामनातुराः पूर्वे वातलाघाः सशतुराः ।

शेषानुशयिता शेषां देहप्रकृतिरुच्यते ॥ ४० ॥

च. सु. ७, ३९-४०

“From the moment of coception some men are equibanced as regards the three vitia—Vāta, Pitta and Kapha and some have a predominance of Vāta, some of Pitta and some of Kapha.

Of them the first alone enjoy perfect health while the rest are ever liable to disease. Their body-habitus is named according to the

continual predominance of a particular vitium in the body". (Car. Sūtra 7, 39-40)

शुक्रक्षोणितसंयोगो यो भवेदोष इत्कटः ।
प्रकृतिर्जायते तेन तस्या मे लक्षणं शृणु ॥ ६३ ॥

सु. शा. ४-६३

"These are the symptoms of the hereditary disposition or constitution formed by the predominant vital habitus formed at the time of the fertilization of the ovum by the sperm". (Suśruta Śārīra 4-63)

शुद्धं स्वभावकर्मभ्यां वाताद्यैर्दुष्टमंशतः ।
रष्टं बीजायं कृद्बीजं तत्र प्रकृतिरुत्तरम् ॥

इरुहण-टीका

"There any part of the healthy seed (germ-cell) is vitiated by the nature and action of the Vitia, i. e. Vāta and the rest, that part of the germ-cell determines the future constitutional type of the person". (Commentary by Dalhana on the above verse).

प्रकोपो वाऽन्यभाषो वा क्षयो वा नोपजायते ।
प्रकृतीनां स्वभावेन जायते तु गतायुषः ॥

सु. शा. ४-७८

"The constitutional condition does not get changed, nor increased nor diminished generally except at the end of life". (Suśruta Śārīra 4-78)

Thus the importance of knowledge of constitution is established both in physiology as well as pathology.

Caraka propounds that there are three main classes of persons. They are the Vātala, the Pittala and Śleṣmala i. e. the one of Vāta habitus, that of Pitta habitus and that of Śleṣma habitus. These are the three main constitutional groups in each of whom one of the triumvirate of biological organizations is predominantly active or pronounced. There are various degrees of combinations of these vitia (दोष) as these habituses are called, of two or three of these being jointly in a hyper or hypo condition. When the symptoms associated with and characteristic of each of these vitia are known, the degree of their combination can be inferred from them. Laying out the general outline of three main categories of constitution, Caraka declares that in the clinical investigation of these three types of constitution the

following are their characteristic traits and qualities. (Car. Vimana. 8)

95-(I). We shall now explain the characteristics of habitus etc. It is thus. The fetal body develops its habitus from the nature of the mother's diet and behaviour, and the nature of the proto-elemental combinations.

95-(II). Among these factors, whichever elements are predominant, will be observed to influence the nature of the fetus; therefore are men spoken of, as of such and such habitus and vital susceptibility beginning from their fetal life.

95. Hence some are of Kapha habitus, some are of Pitta habitus and some of Vāta habitus; some are of the combined habitus. Some are possessed of vital equipoise. The characteristics of these, we shall describe here.

96-(I). The Kapha is unctuous, smooth, soft, sweet, firm, dense, slow, stable, heavy, cold, viscid and clear.

96-(II). Kapha, being unctuous, those of Kapha habitus have glossy limbs; on account of its smoothness they have smooth limbs; owing to its softness they have pleasant, delicate and clear bodies; owing to its softness they have pleasant, delicate and clear bodies; owing to its sweetness they have a profusion of semen, desire for the sex-act and children. On account of its firmness they have firm, well-knit and stable bodies; owing to the denseness of Kapha, they are plump and rounded in all their limbs. Owing to its slowness, they are slow in their actions and speech; due to its stability, they are slow in their undertakings and in the change of moods and pathological condition; owing to its heaviness, they are of firm, large and stable gait; owing to its coldness, their hunger, thirst, heat and perspiration are meagre; owing to its viscidness, they are firm and well-knit in their joints. Similarly owing to its clearness they are of clear looks, of clear and mellow complexion and voice.

96. Owing to the combination of such qualities, those of Kapha habitus are possessed of strength, wealth, knowledge, vitality, gentleness and long life.

97-(I). Pitta is hot, acute, fluid, raw-meatish in smell, acid and pungent.

97-(II). Owing to its heat, those of Pitta habitus are intolerant of heat, very hot in the mouth, of delicate and clear bodies, and have profuse moles, freckles, spots and pimples on the body, excessive hunger and thirst, are subject to early wrinkles, grey hair and baldness, and are possessed generally of scanty, soft and tawny hair on the head, face and body. Owing to its acuteness, they are possessed of keen valour and acute digestive fire, are given to taking excessive quantity of food and drink, are subject to incapacity to bear suffering, and are constant eaters. Owing to its fluidity they have flabby and soft joints and flesh and profuse discharge of sweat, urine and feces. Owing to its raw-meatish smell, they smell very much in their arm-pits, mouth, head and body. Owing to its pungent and acid taste they have a small quantity of semen, limited sex-appetite and scanty offspring.

97. Owing to a combination of such qualities those of Pitta habitus are of moderate strength and life-span and of moderate knowledge, experience, wealth and means.

98-(I). Vāta is dry, light, unsteady, abundant, swift, cold, rough and clear.

98-(II). Owing to its dryness, those of Vāta habitus are of dry, wasted and small bodies, of long-drawn, dry, low, broken, hollow and hoarse voice, and are always wakeful. Owing to its lightness, they are light and inconstant of gait, behaviour, diet and speech. Owing to its unsteadiness, they are restless in their joints, eyes, brows, jaws, tongues, heads, shoulders, hands and feet. Due to its abundance, they are given to much talk and have prominent veins and tendons. Owing to its swiftness they are quick in their undertakings and variation of moods and pathological change. They are quickly affected by fear, likes and dislikes. They are quick in grasping and in forgetting too. Owing to its cold quality, they are intolerant of cold, and are greatly liable to suffer cold, shivering and stiffness. Owing to its roughness, they have rough hair on the head, face and body, rough nails, teeth, mouth, hands and feet. Owing to its clearness they have

cracked limbs and their joints always make noise as they walk.

98. Owing to the combination of such qualities, those of Vāta habitus are generally of small strength, short life-span, scanty offspring and means, and of meagre wealth.

99. In a combined habitus, the qualities are also combined.

100. Those possessed of the equipoise of triumvirate of vitia are endowed with all the good qualities described. This should one examine from the point of view of habitus.

The perfect equilibrium of this vitia is the norm or perfect health.

Having now the full outline of this triumvirate of vitia that determine the total psycho-somatic texture of man, it is necessary to enter into a more detailed inquiry into the nature and mode of operation of this triumvirate of vitia (त्रिविध), and into the justification of their nomenclature.

VI METHOD OF NOMENCLATURE

We shall now proceed to study man's behaviour in the maintenance of health and in his fight against diseases.

Dhatu (धातु)

The living organism includes in its category unicellular life—the tiny speck of undifferentiated protoplasm as well as the man with his highly differentiated organs, tissues and cells. The cell is the functional and structural unit of life. Many lower forms of lives consist only of a single cell. Moreover, man who is so highly evolved a creature, has commenced his life at the unicellular stage, namely the fertilized ovum. The fundamental phenomena of life are identical in all living organisms.

In unicellular life, structure is hardly visible or definable but life-phenomena are all the same as those observed in higher forms of life.

Though the material form of existence is too insignificant

to be noticeable, it is made up of dynamic systems manifesting ceaseless activities. These dynamic systems which fully sustain life and carry out effectively life-functions are the three primary organizations. As they are the fundamental physiological systems sustaining life in co-ordination with that insignificant speck of protoplasm they earn the significant name of **वाग्** or the upholders, a word devived from the root 'वृ to support or sustain'.

In higher life this protoplasm becomes greatly increased in proportion and gets differentiated into various forms in order to carry out the special functions assigned to them; and we find in man several different kinds of tissues or body-elements evolved (**रस** etc.) playing a significant role in the maintenance of the physical body. This differentiation and specialization of tissues is to augment the power of the primary triumvirate of organizations. Hence in man the three primary organizations, Vāta, Pitta and Kapha, as well as specialized tissues of his physical body viz., **रस** etc., evolved for special functions, are both given equal importance and included in the category of **वाग्** or the upholders or sustainers of life.

The highly logical spirit of that age impelled them to be very accurate and meticulous in all matters, especially in definitions and nomenclature.

The human body lives on the food which it ingests everyday. It assimilates out of the food ingested some portion and throws out the rest. Among the primitive unicellular life, this process occurs immediately. But in man with his highly specialized tissues and systems the process of separating the useful from the unuseful material takes place at one region, the process of assimilation at another and that of elimination at yet another region.

The body absorbs according to its needs and capacity, a portion of the useful, the remaining unused and unuseful portion is gradually thrown out by the body. The process of elimination takes some time in the complex machinery of the human body. The matter separated for elimination is often useful and definitely not harmful in

the usual course and which during its sojourn through the excretory channels may be even rendering some service to the body-elements or body-organizations. Thus this waste matter meant for ultimate elimination, though not forming a part of the regular body-elements, does exist in the body enjoying perfect health and is probably rendering service to it. Hence it is also included in the category of **मल** in a general way though it is usually given the significant name of **मल** or waste matter in particular.

Thus the word **मल** includes in its category:—

1. The primary three functional organizations, i. e. the triumvirate which is the primary organization in each and every unit of life.

2. The seven body-elements or tissues of the physical body and structural systems evolved to augment and refine the work of the primary organizations of the triumvirate.

3. The waste or excretory material, healthful in action.

Dosha (दोष)

All the Dhātus may become vitiated and may vitiate locally their neighbouring parts; but the general **दूषयितारः** or the vitiators of the whole body are the triumvirate of organizations. This generalized **दूषणस्वभाव** or vitiating nature is the most common in the triumvirate organization because they are all-pervasive and in constant action to maintain perfect effectiveness of the whole body in ever changing environmental factors.

Thus the word **दोष** (doṣa) is used for:—

1. The three biological organizations of triumvirate.

2. Secretions and excretions, which are formed as immediate, intermediary or end products as the result of the functioning, of these three biological organizations are also identified with **Dōṣa** toxic matter and are often termed **Dōṣa**.

(3) **मल** or the waste matter is also often designated **Dōṣa** as its dominant quality is to pollute.

Mala (मल)

The word **मल** (Mala) is also used in two senses:—

1. The end-products of the digestive process are classified in two parts: one that is assimilated in the body and which becomes a part of the body-elements is called *प्रसाद* (clean matter) while the other part not so assimilated gets converted into some secretory and excretory products serving some auxiliary purpose in the body-functions and gets finally disposed of or eliminated from the body. This is called *मल* or *किट्ट* (unclean matter). But this being the normal or physiological function, this *मल* or *किट्ट*-waste matter is included under the term *आहु* or upholder of body (vide Caraka Sūtra. 28, 4).

(2) The other meaning of *मल* as given in Caraka, (Śārīra 6-17) is all morbid matter in the body which is harmful to it. Under this heading the author puts the following things;—

a. Excretory matter issuing outwards from the orifices of the body in various forms.

b. Over-mature body-elements.

c. Irritated Vāta, Pitta and Kapha.

d. Such other things residing in the body tending to injure it.

Thus healthful *मल* is un-assimilated portion of food ingested, existing in the healthy body while harmful *मल* is harmful matter of any kind existing in the body and doing harm to it.

The word "Doṣa" is derived from 'दुष्' (Duṣ) to vitiate or pollute, to become impure, to be bad or corrupted'.

Each or all the Dhātus or upholders of the body just described viz., the triumvirate organization, body-tissues and the excretory and secretory matter become vitiated in disease condition. But the main part as vitiator is played by the triumvirate organization. Once they are vitiated, they spread their vitiating effects to all the other body-parts and channels, for they are pervading in the whole body.

ओषांसि ओषांश्चेव, आतवश्च आतूनेव प्रदूषयन्ति प्रदुष्टाः । तेषां सर्वेषामेव वातपित्त-
श्लेष्माणः प्रदुष्टा दूषयितारो भवन्ति, दोषस्वभावादिति ॥ अ. वि. ५, ९

"The vitiated body-channels spread the corruption to other body-channels alone, and the vitiated body-elements to other body-elements where as the three vitia, Vāta, Pitta, and Kapha, if vitiated, pollute the entire organism, being as they are of a vitiating nature". (Car. Vim. 5, 9)

सर्वशरीरशरास्तु वातपित्तश्लेष्माणः सर्वस्मिन्शरीरे कुपिताकुपिताः शुभाशुभानि कुर्वन्ति ।

च. सू. २०-२

"Vāta, Pitta and Kapha moving in the whole body produce good and ill effects on the entire system according as they are normal or provoked". (Car. Sūtra. 20, 9)

From the definitions of दोष, वातु and मल discussed above, we see that the term 'दोष' is used:-

(1). Mainly for the three primary organizations which are specially liable to be disorganized and which spread their effects in the whole body and vitiate any or all other parts of the body.

(2). The body secretions pertaining to the functions of each of the triumvirate organization are given the same term as Vāta, Pitta and Kapha, the physiological triumvirate of organizations. As for example:-

अन्नस्य भुक्तमात्रस्य वृद्धस्य प्रपाकतः ।

मधुराद्यान् कफो भावात् केनभूत इदीर्यते ॥

च. वि. १५-९

"Just after ingestion, the food prepared from the six categories of tastes becomes first sweet of taste being digested and leads to the formation of Kāpha or of mucus-like fluid which is of frothy appearance." (Car. Cik. 15-9)

परं तु पक्वमानस्य विदग्धस्याभ्रभावनः ।

आशयाक्यवमानस्य पित्तमच्छमुदीर्यते ॥ च. वि. १५-१०

"Further digestion being continued, the food becomes acid in the next stage of digestion and while it is coming out of the stomach it excites the secretion of limpid bile". (Caraka Cik. 15-10)

पकाक्षयं तु प्राप्तस्य शोष्यमाणस्य वद्विना ।

परिमण्डितपक्वस्य वायुः स्यात् कटुभावनः ॥

च. वि. १५-११

"Thus the food having reached the large intestines and being

dehydrated by the body-heat, is converted into fecal lumps. These being of pungent taste, there occurs increase of Vāta." (Car. Cik. 15-11)

(3). Excretory matters, normal or abnormal pertaining either to the functioning of the triumvirate organization or to the secretory products related to those primary organizations, are given the same designation of Doṣa (दोष) in general and of Vāta, Pitta and Kapha in particular

उपस्थिते क्षेप्तमपि ते व्यावायामाश्रयाश्रये ।

वमनार्थं प्रयुज्जीत निबग्देहमदूषयन् ॥ च. सू. २-८

"...These drugs should be used as emetic by the physician in a way not harmful to the body in gastrogenic disorders characterized by morbid accumulations of Kapha and Pitta". (Car. Sūtra 2, 8).

पक्वाशयगतं दोषं विरेकार्थं प्रयोजयेत् च. सू. २-१०

"...Those should be prescribed for purgation when the morbid matter has accumulated in the colon." (Car. Sūtra 2, 10)

निरुहो बलमग्निं च विज्वरत्वं सुप्तं रुचिम् । ॥१७०॥

परिपक्वेषु दोषेषु प्रयुक्तः शीघ्रमावहेत् ॥

पित्तं वा कफपित्तं वा पित्ताशयगतं हरेत् । ॥१७१॥

खलनं, शीघ्रमलान् बलिर्हरेत् पक्वाशयस्थितान् ॥ च. वि. ३, १७०-१७१

"Evacuative enema, if given when the morbid matter has been fully digested, will immediately increase the vitality and digestive power and produce apyrexia, good cheer, and appetite. Laxation will eliminate Pitta or Kapha, Pitta lodged in the habitat of the Pitta, while enemata will eliminate all the three kinds of morbid matter lodged in the colon." (Car. Vim. 3, 170-171)

In the last verse cited above Vāta etc., are used in their excretory aspect (मल). Thus in order to avoid ambiguity in sense, a thing is given a specific designation in view of its preponderant or special tendency towards a form or function.

These vitia (दोष) are so called because they are considered to be the first things to be modified or morbidified by diet, behaviour or other environmental factors, or by internal factors of emotions, restraint

of natural urges etc. They do not stop at that, but once they are themselves morbidified they proceed to vitiate gradually any of the seven body-elements. Thus these vitia are by virtue of their high degree of susceptibility to vitiation and also by virtue of their active tendency to contaminate the body-elements, are specially designated as vitia (दोष) owing to their doubly condemnable vice. But these very vitia, when in their normal unvitiating state, support, enliven and rear the other elements of the body and are a source of the blessings of health and happiness. They then are indeed the basic elements, the rock-bottom of life in man and though termed vitia owing to their extreme liability to vitiating, deserve to be called the elements (धातु). In their balanced state they are indeed Dhātus; but for convenience of exposition and uniformity of application they are called vitia (दोष) even in their benevolent or sanagenic state. In their morbidified state they are pathogenic and in a science dealing primarily with the pathogenic factors and their various manifestations and operations, it is convenient to fix them up in their pathological state and refer to their physiological status too by the same term prefixed by its non-morbid quality. Thus the unvitiating 'vitium' is called (प्रकृतिभूत) the vitium in its normal state, and the vitiating one as the (विकृतिभूत) morbid vitium. (Car. Sūtra. 12,13). Etymologically, it is interesting to know that the Greek prefix 'dys' as in dysfunction, dysuria, dyspepsia etc., is akin to Sanskrit (दुष्) (*dus*) meaning to be bad, corrupted, spoiled or vitiating.

Śārṅgadharma summarizes the three aspects of these vitia in a verse thus:

जरीरदूषणादोषा धातवो देहधारणात् ।

वातपित्तकफा ज्ञेया मलिनिकरणात्मकाः ॥२॥

आ पृ. ५-२४

"Vāta, Pitta and Kapha are called vitia because they vitiating the body; they are called body-elements or supports because they uphold the body, and they are also known as waste or toxic matter (मल) because they pollute the body". (Śār. Pu. 5 24).

Thus in order to use a specific terminology the words दोष,

वातु and मरु are generally used in the following sense.

दोष = The triumvirate of body-organizations or the triad of vitia.

वातु = The body-elements

मरु = The waste or toxic matter.

VII THE NATURE AND FUNCTIONS OF THE BODY TRIUMVIRATE

त्रिदोषस्वरूपस्य परिचि

Vāta Pitta and Kapha are the names of the three organizations of the body known as the "Triumvirate". Their individual nature, function and mode of operation have been till now discussed in a general way.

Now we shall try to review them in greater detail from physiological, pathological, clinical and therapeutic points of view.

The General Nature and Concept of the Triumvirate

The three organizations of the triumvirate are the very warp and woof of the texture of life. The triumvirate is considered the sole support of the body.

Its physiological or pathological condition is the root cause of existence or dissolution of the body. Suśruta significantly remarks:

वातपित्तश्लेष्माण एव देहसंभवहेतवः । तैरेवास्यापनैरभ्योर्ध्वलक्ष्मिण्डैः शरीरमिदं धार्यते-
ऽपारमिव स्थूणाभिसिद्धिर्भिरुतश्च त्रिस्थूणादाहुरेके । सु. सू. २१-३.

"It is Vāta, Pitta and Śleṣmā alone that bring the body into being. This body is upborne by them in their normal or healthy state established in the lower, the middle and the upper regions of the body respectively, even as a hut is upheld by three poles. Therefore are these called the three poles or supports'. (Suśruta Sūtra. 21-3)

Thus these three organizations, though viewed individually for the purpose of a clear grasp of their peculiar nature and functions, must yet be appreciated in their united and integrated whole as mutually checking and balancing forces in the body. Their sanagenic influence is due to their integrated mode of functioning.

Caraka says that when the triumvirate is in its normal or physiological condition, the man enjoys perfect health; and when it is in the abnormal or pathological state the man suffers from disease.

सर्व एव खलु वातपित्तश्लेष्माणः प्रकृतिभूताः पुरुषस्यपक्षेन्द्रियं यत्कर्तव्यं सुखोपपन्नमायुषा
महतोपपादयन्ति यस्मिन्नेवास्ति वातपित्तश्लेष्मा तत्र च श्लेष्मसेन महता पुरुषमिह कामुष्मंश्च लोके;
विकृतास्तेन महता विपर्ययोपपादयन्ति

च. सू. १२, १३

"To be correct, it is all the three-Vāta, Pitta and Kapha, in their normal condition that combine to make a man whole of his senses, possessed of strength, good complexion and ease and assured of great longevity, even as the triad of Dharma, Artha and Kāma, when properly cherished, secure for him the highest good both here and in the other world. (The same three) if rendered morbid, bring upon the man great tribulation". (Car. Sūtra. 12,13)

दोषाः पुरुषस्य वातपित्तश्लेष्माणः । ते प्रकृतिभूताः शरीरोपकारका भवन्ति, विकृतिभूताः
जास्तु खलु नानाविधैर्विकारैः शरीरमुपसाधयन्ति ॥ च. वि. १-५

"And the vitia are three: Vāta, Pitta and Kapha. When normal they cause the proper functioning of the body; when they have become abnormal they certainly afflict the body by causing disorders of various types". (Car. Vim. 1, 5)

Caraka further states that the triumvirate is ever present in the body either in physiological state or the pathological state:

नित्याः प्राणभृतां देहे वातपित्तकफाक्षयः ।

विकृताः प्रकृतिस्थे वा वात दुष्पुंसेन पण्डितः ॥ च. सू. १८-४८

"Vāta, Pitta and Kapha, reside either in their normal or pathological state in the bodies of all creatures Hence the learned physician should desire to recognise them". (Car. Sūtra, 18, 48)

The importance of the triumvirate in supporting the body is well brought home by Suśruta in the following simile.

विसर्गदानविक्षेपेः सोमसूर्यानिळा यथा ।

धारयन्ति जगदेहं कफपित्ताक्षयः ॥ सु. सू. २१-८

"Just as the "moon, sun" and wind uphold the world by

their action of release, absorption and dissemination respectively, even so do Kapha, Pitta and Vāta act with regard to the body". (Suśruta Sūtra. 21-8)

The triumvirate is all-pervasive and circulate to every part of the body. As the vitia are circulating in the entire body, their normal or provoked condition gives rise to good or bad health respectively.

सर्वशरीरचरास्तु वातपित्तश्लेष्माणः सर्वस्मिन्शरीरे कुपिताकुपिताः शुभाशुभानि कुर्वन्ति ।

च. सू. २०-९

"Vāta, Pitta and Kapha moving in the whole body produce good or ill effects on the entire system, according as they are normal or provoked". (Car. Sūtra 20-9)

The function of the triumvirate is integrative though pentad of foci are described for each vitium where dominance of the function of that particular vitium is observed.

Suśruta states—

तत्र, प्रस्पन्दनोद्बहनपूरणविवेकधारणलक्षणो वायुः पञ्चधा प्रविभक्तः शरीरं धारयति ॥

रागपक्वयोजस्तेजोमेषोन्नकृत् पित्तं पञ्चधा प्रविभक्तमग्निकर्मणाऽनुग्रहं करोति ॥

सन्धिसंश्लेषणस्नेहनेरोपणपूरणवलयैर्बहुश्लेष्मा पञ्चधा प्रविभक्त उदककर्मणाऽनुग्रहं करोति ॥

सु. सू. १५. ४.

"The fivefold Vāta upholds the body by its characteristic functions of throbbing, transmission, filling up, separation and retention".

The fivefold Pitta which causes pigmentation, digestion, vital essence, lustre, intelligence and heat, nourishes the body by its thermogenic function.

The fivefold Ślesmā which causes the cohesion of the joints, unctuousness, growth, replenishment, strength and firmness, nourishes the body by its (colloidal) watering function". (Suśruta Sūt. 15, 4)

Vāgbhaṭa says:

इति प्रायेण दोषाणां स्थावान्यविकृतात्मनाम् ।

व्याधिनामपि जानीयात्कर्माणि च पुणक् पुणक् ॥

अ. ह. सू. १२-१८

"Thus the focal places of this generally all-pervasive vitia are to be known as also the different actions of the vitia (with ref. to these foci).

Pentad of foci of each of the vitia has great diagnostic importance as the signs of discondance of the vitia are manifested first and certainly in their respective pentad of foci.

Thus it helps to diagnose the disease in its earliest stage.

Caraka states—

स्वस्थाने मासुहोऽवश्यं वर्धने कफसंक्षये ।

चि. १९-१२१

{ "The Vāta necessarily gets increased in its own habitat consequent upon the decrease of Kapha." (Car. Cik. 19, 121)

Moreover the general line of treatment shall have to be modified when it is to be practically applied to disease conditions originating in or affecting dominantly the particular pentad of foci.

Vāgbhaṭa says—

ततः स्थानविशेषेण मेऽजविशेषः पर्येषितव्यः ।

अ. सं. सू. २३

"Therefore special line of therapeutics has to be pursued to suit the special site of affection . (Aṣṭ. Saṅg Sūtra, 23)

Physiological Vata (प्रकृतिभूतवात)

Vāta we know as the vital, mobile and motivating principle of all life functions. Its pervasion is throughout the body, for no part or cell of the body can function without its motivation. Its function is to cause all movement including that of the conveying of sense-impressions and thought and emotional impulses. Thus all neuromuscular activity, voluntary as well as involuntary is at its bidding and all sense-functions that form the very basis of life-play are the functions of Vāta. All the life-functions including the daily metabolic processes of maintaining the proportion and tone of body-elements belong to Vāta. It is indeed the very life-principle, the overlord of the body. That is why Ātreya calls it वायु and सम्प्रव्यवहारः the all-controller of the body.

The Actions of the Organizations of Normal Vāta as described by Caraka

१. वायुस्तन्वन्नधरः The Vāta is the upholder of both, structure and function (in the body).
२. प्राणोदानसमानव्यानापानाश्च It is the very self of the five forms of Vāta in the body viz., Prāṇa, Udāna, Samāna, Vyāna and Apāna.
३. प्रवर्तकश्चेष्टानामुच्चावचानाम् It is the impeller of upward and downward movements.
४. नियन्ता च मनसः The controller and conductor of the mind.
५. सर्वेन्द्रियाणामुद्योजकः The inspiritor of all the senses.
६. सर्वेन्द्रियार्थानामभिवोदा The conveyer of all the sense-stimuli.
७. सर्वशरीरधातुव्यूहकरः The marshaller of the body-elements.
८. सन्धानकरः शरीरस्य The synthesizing principle in the body.
९. प्रवर्तको वाचः The impeller of speech.
१०. प्रकृतिः स्पर्शशब्दयोः The cause of feeling and audition.
११. श्रोत्रस्पर्शनयोर्मूलम् The source of the auditory and tactile senses.
१२. हर्षोत्साहयोर्गोनिः The origin of all excitation and animation.
१३. समीरणोऽग्नेः The stimulator of the gastric fire.
१४. दोषहर्त्रोऽपणः The desiccator of the morbid vitia.
१५. क्षेपता बहिर्मलानाम् The eliminator of excrement.
१६. रथूष्णान्नोत्सर्गं मेत्ता The deobstruent of the gross and subtle body-channels.
१७. कर्ता गर्भाकृतीनाम् The modeller of the fetal form.
१८. आशुषोऽनुवृत्तिप्रत्ययभूतो भवत्यकुपितः । The sustaining principle of life.

च. सू. १२-८

(Car. Sūtra 12, 8)

Caraka describes the functions of वात in short as follows:

उत्साहोष्णानिःश्वसचेष्टा पातुगतिः समः ।

समो मोक्षो गतिमतां वायोः कर्माधिकारजम् ॥ च. सू. १८-८९

“Actions of the normal Vāta are animation, inspiration and expiration (respiratory movement), body movement, regular circulation of body-elements and regular elimination of excretions”. (Car. Sūtra. 18-49)

And finally he makes an aphoristic statement all-comprehensive of the function of Vāta.

सर्वा हि चेष्टा वातेन न प्राणः प्राणिनां स्मृतः ॥ च. सू. १७-११८

"All the life-activities of the body are performed by the normal Vāta which is said to be the life of living beings". (Car. Sūtra, 17, 118)

Suśruta describes the function of Vāta as under:

प्रपञ्चोऽहोऽपर्यवित्तैकधारणलक्षणो वायुः । पञ्चधा प्रविभक्तः शरीरं धारयति । सु. सू. १८-४

"The fivefold Vāta upholds the body by its characteristic functions of throbbing, transmission, filling up, separation and retention".

Vāta is given the supreme importance in the series of the triumvirate.

Caraka says --

वायुरायुर्वलं वायुर्वायुर्वाता शरीरिणाम् ।

वायुर्विश्वमिदं सर्वं प्रभुर्वायुश्च कीर्तितः ॥ च. वि. २८-३

"Vāyu is life and vitality: Vāyu is the supporter of all embodied beings; Vāyu is verily the whole universe; and Vāyu is the lord of all. Thus is Vāyu extolled". (Car. Cik. 28, 3)

Suśruta describes Vāta or Vāyu in highly eulogistic words:

स्वर्भूरेष भगवान् वायुरित्यभिषिद्धितः ॥५॥

स्थानन्तः प्राप्नित्वासाव च सर्वं गत्वास्तथ च ।

सर्वेषामेव सर्वात्मा सर्वलोकनमस्कृतः ॥६॥

स्थित्युत्पत्तिविनाशेषु भूतानामेष कारणम् सु. नि. १, ५-७

"Vāyu is praised as the self-born and worshipful one. As it is free, eternal and all-pervasive, it is the soul of all beings and worshipped by all the world. It is the cause of the creation, subsistence and dissolution of all beings". (Suśruta Nid. 1, 5-6)

The supreme status of Vāta may be also attributed to its being the propeller and director of the movement of the other two members of the triumvirate.

पित्तः पृथुः कफः पृथुः पृथ्वी मलघातनः ।

वायुना च न नीयन्ते तत्र गच्छन्ति मेव सर्वे ॥ शा. पू. ५-२५

"Pitta is lame, Kapha is lame and lame too are the excretions and the body-elements. These, like a cloud, go wherever they are carried by Vāyu (wind or Vāta)". (Śārṅ Pu. 5,25)

Physiological Pitta (प्रकृतिभूतपित्त)

Pitta is indeed the thermal element or element of fire. The integrative organization of it does the following functions in the body.

Caraka states—

अग्निरेव शरीरे पित्तान्तर्गतः । च. सू. १२-११

"It is Agni (Fire) alone that is immanent in the Pitta".

Suśruta, in reply to a pertinent question raised by the pupil whether Pitta is different from fire-element or whether Pitta and fire-element are one and the same, declares:

न खलु पित्तस्यतिरेकादन्योऽग्निरपलभ्यते । सु. सू. २१-९

"There is known to be no fire other than Pitta (in the body)".

This, as has already been stated, is the organization of the thermal balance of the body. It is the total thermal function or process going on in the body including all the secretions internal or external that go to build up the metabolic process and maintenance of the thermal optimum necessary for the preservation and growth of all life-processes.

It has also the further function of giving coloration or of pigmenting the body-elements such as redness in the blood, flesh and marrow and the pigmentation of the excretions like feces and urine.

यत्तु यकृतलीढोः पित्तं तस्मिन् रज्जकोऽग्निरिति संज्ञा, सरसस्य रागकटुकः । सु. सू. २१, १०.

"The Pitta of the liver and the spleen is known as the pigmenting aspect of the thermal organization (Pitta). It is said to cause the red pigmentation of the nutrient fluid". (Suś. Sūtra. 21-10)

The actions of normal Pitta are described as follows:—

अग्निरेव शरीरे पित्तान्तर्गतः कुपिताकुपितः शुभाशुभानि करोति; तद्यथा—पक्षिमपक्षि, वृक्षमववृक्षे, माशामात्रस्वमूत्रमण्डः प्रकृतिविकृतिवर्णौ, सौर्यं, भयं, क्रोधं, हर्षं, मोहं, प्रसादमित्येवमादीनि चापराणि द्वन्द्वानीति ॥ च. सू. १२-११

“It is Agni (fire) alone that, located in the Pitta, gives rise to good and evil consequences according as it is in a normal or abnormal condition. These consequences are digestion and indigestion; vision and loss of vision; the normality and abnormality of temperature; the healthy and diseased look; intrepidity and fear, anger and delight, confusion and lucidity and such other pairs of opposite qualities”.

पित्तदेशोष्मणः पक्तिर्नराणामुपजायते ।

तच्च पित्तं प्रकुपितं विकारान् कुरुते बहून् ॥ च. सू. १७-११६

“It is by the heat of Pitta that digestion takes place in men, and when that very Pitta is in a provoked condition, it causes various diseases”.

दर्शनं पक्तिरूपमा च क्षुत्तृष्णा देहमार्दवम् ।

प्रभा प्रसादो मेघा च पित्तकर्माधिकारजम् ॥

च. सू. १८-५०

“Actions of the normal Pitta are power of vision, digestive fire, body-heat, hunger, thirst, softness of body, lustre, clarity of mind and intelligence”.

Susruta describes the function of Pitta organization as under:-

रागपक्त्वोजस्तेजोमेघोष्मकृत् पित्तं पञ्चधा प्रविभक्तमधिकर्मणाऽनुग्रहं करोति ॥

सु सू. १५-२

“The fivetold Pitta which is causative of pigmentation, digestion, vital essence, lustre, intelligence and heat nourishes (the body) by its thermogenic function.”

Physiological Kapha (प्रकृतिभूतकफ)

Caraka calls Śleṣmā, the colloidal water in the body as Soma (सोम एव शरीरे श्लेष्मान्तर्गतः). It is already described as the fluid matrix for the play of life. It is the living fluid or the protoplasm in which all the operations of life are made possible; it really serves as the stage for life.

Śleṣmā holds the joints together, does all cohesive, nutritive, developing and stabilizing functions. It promotes the well-being of the body by its watering activity. It thus supplies the living waters for the

roots of life. In its physiological aspect it is the strength and stamina of man but becomes an impurity fit to be eliminated when it is vitiated.

सोम एव शरीरे श्लेष्मान्तर्गतः कुविताकुपितः शुभाशुभानि करोति । च. सू. १२-१२

"It is Soma (the water-element) alone, located in the Kapha of the body, that gives rise to good and evil consequences".

प्राकृतस्तु बलं श्लेष्मा विवृणो मल उच्यते ।

स कैकोजः स्मृतः काये ह च पाप्मोपदिश्यते ॥ च. सू. १७-११७

"The normal Kapha constitutes the body-strength while the morbidised Kapha becomes a vitiated element. It is said to be the vital essence of the body when normal, while it is described to be the source of ailment when morbid".

स्नेहो बन्धः स्थिरत्वं च गौरवं वृषणा बलम् ।

क्षमा धृतिरलोभश्च कफकर्माधिकारजम् ॥ च. सू. १८-७१

"Actions of the normal Kapha are causing visconsuass, cohesion, firmness, heaviness, potency, strength, forgiveness, fortitude and greedlessness".

सन्धिरंश्लेषणस्नेःनरोपपन्नवलयैर्गच्छच्छ्लेष्मा पञ्चधा प्रविभक्त उदककर्मणाऽनुग्रहं करोति ।

सु. सु. १५-४

"The fivefold Ślesmā which is causative of the cohesion of the joints, unctuousness, growth, replenishment, strength and firmness, nourishes (the body) by its (colloidal) watering function."

These very physiological organizations when they become disorganized and vitiated behave pathologically in the body.

We need not repeat the whole references as they are already quoted in previous pages. We shall give only the reference of chapter and verse.

Caraka Sūtra 12—13. 18—48. 20—9.

„ Vimāna 1—5.

Suśruta Sūtra. 21—3.

Disease conditions produced by the pathological behaviour of each member of the triumvirate:—

Pathological Vata (विकृतिभूतवात)

Caraka describes the following disease-condition produced when Vāta behaves pathologically.

कुपितस्तु खलु शरीरे शरीरं नानाविधैर्विकृतिरुपपत्तिः, बलवर्णसुखायुषामुपवृत्ताय, मनो व्याहर्षयति सर्वेन्द्रियाण्युपहन्ति, निमिदन्ति यस्मान् विकृतिरुपापादयत्यतिपाकं वा धारयति, भक्ष्योदसेऽद्वैत्यातिप्रलपाच्च नयति प्राणाश्चोपव्याद्धि । च. सू. १२-८.

“When however, the Vāta becomes abnormal in the body, it afflicts the organism with diverse kinds of disorders, tending to impair its strength, complexion, well-being and life; it depresses the mind; impairs all the senses; destroys the fetus in utero, produces deformity in it, or unduly prolongs the period of gestation: gives rise to fear, grief, stupefaction, depression of the spirits and delirium and obstructs the vital functions’.

He further states that abnormal functioning of Vāta is the root cause in the following disease-conditions:

संसर्गव्यासञ्जमेदसादहर्षतर्षण्यवर्तमानतद्व्याधेश्चेशीने, तथा स्वरपल्लवविशदसुषुप्तिरुपवर्णकपाय-
पिरसुखरसदोषश्च सुषुप्तिवृद्धोदनात्मनखजतादीनि च वायुः प्रवर्णति; तैरन्वितं वातविकारमेवाव्यवस्येत् ॥

च. सू. २०-१२

“They are:—subluxation, dislocation, dilatation, contraction, laxation, depression, excitation, attraction, tremor, circular movement, motion, pricking pain, aching pain and movement; as also coarseness, harshness, clearness, porousness, dusky-redness, astringent taste, dysgeusia, dehydration, aching pains, numbness, contractions, rigidity, lameness, etc. These are the effects produced on the body by the actions of Vāta. The condition accompanied with any of these signs or symptoms should be diagnosed as a Vāta-disorder”.

And later on Caraka mentions some conditions that can be produced by Vāta when it becomes located in particular regions or organs.

सङ्कोचः पर्वणां स्तम्भो मेढोऽस्थनां पर्वणामपि ॥ २० ॥

लोमहर्षः प्रलापश्च पाणिपृष्ठसिरोमहः ॥

खान्ज्यपातुल्यकुञ्जरं शोषोऽज्ञानामनिद्रता ॥ २१ ॥

गर्भशुक्रजोनाशः स्पन्दनं गात्रघुसता ।

शिरोनासाक्षिजत्रूणां प्रीवायाश्चापि हुण्डनम् ॥ २२ ॥

भेदस्तोदातिराक्षेपो मोहश्चायास एव च ।

एवंविधाने रूपाणि करोति कुणितोऽनिलः ॥ २३ ॥

हेतुस्थानविशेषाच्च भवेद्भोगविशेषकृत् ।

च. वि. १८, २०-२३

“Contraction, stiffness of joints, aching pain in bones and joints, horripilation, garrulousness, spasticity of the hands, back and head; lameness of hands and feet, hunch back; atrophy of the limbs; insomnia; destruction of fertility, fetus and menses; tremors; anesthesia and paralyses of limbs; ticks of muscles of the head, nose, eyes, shoulder, girdle and neck; splitting pain, pricking pain, agony convulsions, delusions and fatigue—such are the general symptoms which the provoked Vāta manifests on account of the differences in the etiological factors and in the seats of affection; it produces the specific characteristics in each disease”. (Car. Cik. 18, 20-23)

Pathological Pitta (विहतिभूतपित्त)

Caraka describes the physiological as well as pathological conditions caused by Pitta in the following dyads.

अग्निरेव त्वरीरे पित्तान्तर्गतः कुपिताकुपितः शुभाशुभानि करोति । तत्स्थथा-पक्वमपक्वं दर्शनम-
दर्शनं, मात्रामात्राभूतमगः प्रकृतेर्विकृतिद्वयं शोथे भयं क्रोधं हर्षं मोहं प्रसादमित्येवमादीनि चापराणि द्वन्द्वानीति ।

च. सू. १२-११

“It is Agni (Fire) alone that located in the Pitta, gives rise to good and evil consequences according as it is in a normal or abnormal condition. These consequences are digestion and indigestion; vision and loss of vision; the normality and abnormality of temperature; the healthy and diseased look; intrepidity and fear, anger and delight, confusion and lucidity, and such other pairs of opposite qualities”. (Car. Sūtra 12, 11)

Pathological functioning of Pitta will lead to the following conditions:

दाहौष्ण्यपाकश्वेदक्रेदकोथनप्लवरागा यथास्वं च गन्धवर्णरसामिनिर्वर्तनं पित्तस्य कर्माणि;
तैरन्वितं पित्तविकारमेवाध्यवश्येत् । च. सू. २०-१५

"Burning, heat, suppuration, perspiration, softening, sloughing, itching, discharge, redness and the emanation of smell, color and taste are the effects produced on the body by the action of Pitta. Conditions accompanied with any of these symptoms should be diagnosed as a Pitta-disorder". (Car. Sūtra. 20, 15)

Pathological Kapha (विकृतिभूतकफ)

Caraka attributes the following conditions of health and disease to the physiological and pathological behaviour respectively of the Kapha.

सोम एव शरीरे श्लेष्मान्तर्गतः कुपिताकुपितः शुभाशुभानि करोति । तद्यथा-दार्ढ्यं, शैथिल्य-
मुपचयं, कार्यमुत्साहमाकृत्यं वृषतां ह्रीवतां ज्ञानमज्ञानं बुद्धिं मोहमेवमादीनि चापराणि हन्द्धानीति ॥
च. सू. १२-१२

"It is Soma (the water-element) alone, located in the Kapha of the body, that gives rise to good and evil consequences, according as it is in normal or abnormal condition. These are: compactness and flabbiness, plumpness and emaciation, zest and lassitude, virility and impotence, knowledge and ignorance, understanding and stupefaction and such other pairs of opposite qualities". (Car. Sūtra 12, 12)

Moreover the following conditions will occur when the function of Kapha organization is deranged.

श्लेष्मैश्चैत्यकण्डूस्त्वैर्यंगीरवस्नेहसुप्तिलेपोपदेहवन्धमाधुर्यच्चिरकाशित्वानि श्लेष्मणः कर्माणि; तैरन्वितं
श्लेष्मविकारमेवाध्यवस्येत् । च. सू. २०-१८

"Whiteness, coldness, itching, fixity, heaviness, unctuousness, numbness, humidity, excretory secretion, obstruction, sweetness and chronicity are the effects produced in the body by the action of Kapha. The condition accompanied with any of the above symptoms should be diagnosed as a Kapha-disorder". (Car. Sūtra 20, 18)

Clinical Manifestations and their Interpretation in Physical Qualities

When one of the triumvirate is deranged or thrown off its norm, it invariably affects the balance of the other organizations and thus sets

in motion the triad of vitia operating in disease-conditions with one or two of them in a relatively pre-ponderant condition. When two vitia are provoked and act in combination, the condition is called *संसर्ग* or bi-discordance. When all the three are provoked and combine together to produce the disease, the condition is called *सन्निपात* or tridiscordance. Such discordance of the triumvirate will give rise to clinical manifestation of physical signs which will be observed either in the whole body or in its parts viz., body-elements, secretions or excretions, in the form of exaggerated, diminished or deranged physical qualities.

The clinical investigation of a disease-aspect was thus always in terms of qualities augmented or diminished by the effect of the vitium, and the determination of the treatment was for the specific quality aspect of the vitium or the vitia concerned. Thus the equation between the nature and degree of the symptom and the drug called for, was the main feature of clinical investigations. The pathological processes were recognised by the effects associated with the vitia in their operation on the psycho-somatic whole.

In psychic disorders the immediate intermediary and terminal results produced on the psyche by the various processes of each of the triumvirate in health and disease were observed minutely and correlated with the particular phase of the vitium as well as with the secondary changes in the physical body.

The psychic symptoms included changes in character, behaviour, proclivities, inclination, urges, dreams etc.

In somatic disorders similar examination was made of the physical body. All body-tissues and systems were physically examined (*सारवः परीक्षा*); also all the secretions and excretions of the body were thoroughly examined. The results obtained by all these examinations were correlated with the particular phase of the vitium or vitia and were also coordinated with the secondary psychic changes.

The final results of all these examinations were reduced to and interpreted in quality-equation for simplification of the methods of physical examination and of practical therapeutics.

What the main physical qualities observed in the body signifying the presence or dominance of each of the triumvirate are and what the principles of practical therapeutics should be to counteract the over-dominance of that vitium are briefly but clearly described in the following three verses by Caraka.

रूक्षः शीतो कृवुः सूक्ष्मश्चकोऽथ विक्लवः खरः ।

विपरीतगुणैर्द्रव्यैर्माहितः संप्रणाशयति ॥५९॥

सस्नेहमुष्णं तीक्ष्णं च द्रवमम्लं सरं कटु ।

विपरीतगुणैः पित्तं द्रव्यैराशु प्रणामयति ॥६०॥

गुरु-शीत-मृदु-स्निग्ध-मधुर-स्थिर-पिण्डकाः ।

क्षुब्धमणः प्रशमं यान्ति विपरीतगुणैर्गुणाः ॥६१॥

च. सू. १, ५९-६१

“Vāta is dry, cold, light, subtle, unstable, clear and rough; it is quieted by substances of antagonistic qualities.

Pitta is slightly unctuous, hot, acute, fluid, acid, mobile and pungent; it is readily quieted by substances of antagonistic qualities.

Kapha is heavy, cold, soft, unctuous, sweet, stable and viscid; it is quieted by substances of antagonistic qualities”. (Car. Sūtra 1, 59-61)

All pathological conditions are grouped under two headings.

(1). Imbalance condition (वैषम्य) due to increase or decrease
(वृद्धि-क्षय)

(2). Vitiation condition (दोषप्रकोप)

Imbalance Condition (वैषम्य)

This is brought about by simple process of increase or decrease either in the function or the structure of the body. It is a minor pathological condition of hyper or hypo state, being merely deviation from the normal constant of the body-function or structure.

It will however cause some disturbance in the mutually well balanced state between the various functional and structural systems of the body. This disturbance of the equilibrium or balanced state is the imbalance condition.

Vitiation Condition (दोषप्रकोप)

This is the real or major pathological condition brought about by the vital reaction or vitiation process. The triumvirate of organizations having passed beyond the imbalance stage, become disorganized and turn into irritants and tend to vitiate the whole or part of the body functions or structures.

How constitutional factors of the individual resist the incursion of harmful factors in the body, how one, two, or all three vitia get provoked, irritated or inflamed, or get vitiated by endogenous or exogenous factors, how they overpower the whole body when all of them get highly provoked, how when not so highly provoked they circulate in the body and get located in susceptible parts, how the constitution of local part reacts to and resists these irritant vitia and what are the terminations of this struggle between the body and the noxious factors, make the most marvellous story of biological activities in Man.

VIII. IMBALANCE CONDITION (वैषम्य) DUE TO INCREASE OR DECREASE (वृद्धि-क्षय)

Imbalance condition brought about by the increase or decrease of functional or structural system either in tempo or quantum is a simple pathological process mainly concerned with the particular system affected. It is of greater importance from the point of view of maintenance of perfect health. It results generally from errors of regimen of personal hygiene and it can often be rectified and certainly prevented by careful observance of rules of personal regimen (स्वस्थवृत्त). If the condition of imbalance is allowed to progress further, it will lead to the next stage of vitiation process. The causes of imbalance are mainly some faults either in the natural environments of man or some faults in the observance of personal regimen.

Caraka states in general the causes of balance and imbalance conditions as under:-

कारुण्यद्विप्रयार्थनां योगो मिथ्या न जाति च ।

द्वयाभ्रयाणां व्याधीनां त्रिविधो हेतुसंग्रहः ॥ ५४ ॥

शरीरं सत्त्वसंज्ञं च व्याधीनामाश्रयो मतः ।

तथा सुखानां, योगस्तु सुखानां कारणं समः ॥ च. सू. १, ५४-५५

"The complex of causes with reference to disease, psychic and somatic, is either erroneous, inadequate or excessive interaction of time, mind, senses and sense-objects.

The body and that which is called the mind are both considered to be the abodes of diseases, likewise of well-being: right contact or interaction of the above is the cause of well-being. The cause of well-being is the harmonious or concordant interaction". (Car. Sūtra. 1, 54-55)

Homologous environmental factors maintain health; any variation disturbs the balance-constant.

The first factor is काल i. e. climatic or seasonal environment.

India has three definite seasons in a year with specific characteristics of each शीत, उष्ण and वर्षा i. e. winter, summer and rainy season, with the dominance of cold, heat, and humidity respectively.

The body has to adjust its balance-constant in conformity with this periodic climatic changes.

Thus imbalance can occur in two ways—

1. If climatic variations are not happening in a natural or normal way but become too intense or weak or perverted and the reserve power of the man's constitution cannot cope with such variations and hence the balance of his body-constants cannot be steadied or stabilized, the condition of Imbalance occurs.

2. Or the condition of imbalance may occur even with normality of natural climatic environment if body vitality has been lowered by age, disease or any other factor.

The second factor is बुद्धि i. e. intelligence. This is further expounded by Caraka as follows—

बुद्ध्या विषमविज्ञानं विषमं च प्रवर्तनम् ।

प्रज्ञापराधं जानीयान्मनसो गोचरं हि तत् ॥१०९॥

च. भा. १, १०९

चक्रपाणिटीका— विषमविज्ञानो विषयज्ञानाद्विषमवाग्देहप्रवृत्तिरपि भवति ।

"Misunderstanding by the intellect and wrongful conduct are to be understood as 'volitional transgression,' because they come under the ken of the mind." (Car. Śār. 1-109).

"Owing to the perception of things, in a manner that is contrary to their real state of existence, there result wrongful speech and conduct". (commentary on the above verse by Cakrapāṇi)

Here the vital relationship subsisting between psychic and somatic life is clearly emphasized. Thus a somatic transgression has psychic repercussions and likewise psychic transgressions lead to somatic disturbances. Therefore volitional transgression (प्रवृत्ति) of either kind leads to disorders affecting the entire Psycho-somatic unit.

The third factor is इन्द्रियार्थ i. e. sense-objects.

These sense-objects are items of diet and pleasures of the senses, involving the diet and behaviour of Man. The sense-object of taste is food, and those of sight, smell, hearing and touch constitute pleasures of art, beauty, music and love; in all these contacts, moderation and agreeability to one's nature and capacity should be the guiding factors. Transgression of the bounds of moderation and agreeability relatively to one's nature and capacity are bound to lead to psycho-somatic strain and discordance resulting in disease.

Practical wisdom is discerned in the precept of Caraka who advises to prescribe personal regimen in accordance with individual constitution so that a person can ever maintain the absolute standard of perfect health.

विपरीतगुणस्तेषां स्वस्थवृत्तेर्विबिहितः ।

च. सु. ७-४१

"Having regard to the rules of healthful living, in the case of those who are characterized by the predominance of one vitium, the use of things antagonistic in quality to that particular vitium is beneficial." (Car. Sūtra. 7, 41)

The causes of increase and decrease of body-elements is given by Caraka as follows:—

एवमेव सर्वधातुगुणानां सामान्ययोगाद् वृद्धिः, विपर्ययाद् हासः।

च. भा. ६-१०

"In this very manner, there is increase of the tendencies of the body-elements by the accession of like factors, and decrease by the accession of unlike factors." (Car. Śārīra. 6, 10)

The mode of action of these causes of increase and decrease is described as follows:—

स तु एवंगुणैः (by its qualities)

एवंद्रव्यैः (by the nature of substances)

एवंप्रभावैः (by its specific action)

च कर्मभिः (by its normal action)

च. सू. १२-५

All the functions and structures that sustain the body will be affected by this pathological condition of increase or decrease.

The functions and body-structures which sustain the body are described by Suśruta as follows:

दोषधातुमलमूलं हि शरीरम्।

सु. सू. १५-३

"The body indeed has its root-support in the vitia, the body-elements and the excretory substance."

So there can be increase or decrease condition of any of them; and such change in turn will disturb the equilibrium between the various functional and structural systems of the body and will cause Imbalance condition.

The Doṣas (दोष) are three viz., Vāta, Pitta, Kapha.

The Dhātus (धातु) are seven viz., Nutrient fluid, blood, flesh, fat, bone-marrow and semen.

The Mala (मल) are feces, urine, sweat, menstrual fluid, bile etc.

The signs and symptoms produced by these conditions of increase and decrease in each of them are carefully observed and described in great detail in the classics of Āyurveda and the therapeutic measures given to rectify each condition.

न्यूनान् धातून् पूरयामः, व्यतिरिक्तान् हावयामः

च. सू. १०-६

“We replenish body-elements that have suffered decrease, and deplete those that have undergone increase.”

The superb level to which the clinical science and practical therapeutics of the ancients had advanced becomes evident from the following verse of Suśruta.

दोषधातुमलक्ष्णीणो बलक्षीणोऽपि वा नरः ।
स्वयोनिवर्धनं यत्तदन्नपानं प्रकाङ्क्षति ॥
यद्यदाहारजातं तु क्षीणः प्रार्थयते नरः ।
तस्य तस्य स लाभे तु तं तं क्षयमपोहति ॥

सु. सू. १५, ३२-३३

“The person whose vitia, body-elements, excretory matter and body-strength have suffered diminution, craves for such varieties of food as are the sources of these diminished objects. By satisfying the yearning for the type of food which supply those deficient constituents of the body, their diminution is corrected.” (Suś. Sūtra. 15, 32-33)

Vāgbhaṭa says —

यदन्नं द्वेष्टि यदपि प्रार्थयेताविरोधि तु ।
तत्तत्त्यजन् समन्त्रंश्च तौ तौ वृद्धिक्षयौ जयेत् ॥

अ. ह. सू. ११-४२.

“Whatever type of food a person dislikes and whatever he craves for, by avoiding and satisfying these respectively should he correct the excess and paucity respectively of the body-constituents.” (Aṣṭ. Hṛd. Sūtra 11, 42)

That this Imbalance condition due to increase or decrease has greater importance in the maintenance of positive and perfect health becomes evident when we find the 15th chapter of Sūtrasthāna which is devoted to the description of the condition of वृद्धि and क्षय by Suśruta, ends with the masterly definition of perfect health:—

समश्लेषः समाग्निश्च समधातुमलक्रियः ।
प्रसन्नात्मेन्द्रियमनाः स्वस्थ इत्यभिधीयते ॥

सु. सू. १५-४४

"He that is possessed of the proper balance of the vitia, the metabolic heat, the body-elements and the excretory functions and who is possessed of absolute clarity of the spirit, the senses and the mind, is said to be enjoying perfect health." (Suś. Sūtra 15-44)

IX. VITIATION PROCESS (द्विषप्रकोप)

When the imbalance condition of the triumvirate transgresses a particular limit of accumulation there happens disorganization of the triumvirate of organizations.

As a result of rupture of the integrative functions of these organizations, the circulation and distribution of these dynamic functional principles become irregular and misdirected. If at such unfavourable moment, there occurs the incidence of some exciting factor, the vitium or vitia become upset, provoked and vitiated and assume the vitiating mood. The body as a whole or some part of it may not tolerate the provoked, angry and vitiating character of the vitium and becomes irritated and thus the organization that was sustaining the very health of the body becomes an irritant and a pathogenic factor at this moment. This stage is called the stage of provocation of the vitia.

Vitiation Process or Pathogenesis

This is the real or major pathogenesis. It is quite different from minor pathological condition or imbalance condition brought about by the simple process of increase or decrease which is mere variation in quantity. It is a quantitative change, while the vitiation process is the morbid modification of the qualities or functions of the triumvirate of organizations. It is a qualitative change in the functions of the vitia. The vital pathological process is the drama of action and reaction of the triumvirate or the phenomena manifested in the body by them when once they are converted into pathological state from their physiological state.

The hero who rules and protects the body is encroached upon or assailed by vicious or malevolent exciting factors. These immediate exciting etiological factors may come from endogenous or exogenous sources and the battle-royal issues between the triumvirate

and the etiological factors. The hero, the triumvirate, marshals all his forces and equipment and destroys the enemies or nullifies their injurious influences. But if the enemies turn out to be stronger than the hero or the incidence of attack is too sudden, the issue will be otherwise. The triumvirate will be vitiated and it will carry out vitiation all over the body.

The intensity and periodicity and results of this vitiation-process depend upon the strength of etiological factors, vital power of triumvirate and of body-elements and the extraneous help each of them receives and the method of fight they adopt.

The following types of disease-conditions may be produced by vitiation pathogenesis.

1. Vitiation process spreads with all intensity and affects the entire body; the body gives no or poor resistance. There will be acute general disease-condition.

2. Vitiation process is strong enough to affect the whole body, but the body vitality encounters the incursion with nearly equal force, a prolonged fight ensues with fluctuation on either side; vitiation process waxing and waning according to the extraneous circumstances.

3. Vitiation process does not affect the whole body but becomes located in some system, part, organ or tissues; vitiation process begins to spread, the constitution of the local tissues tries to resist and local inflammatory reaction results. If the fight is acutely carried out there will result acute inflammation of the part.

4. If the local vitiation process is slow in progress there will be chronic inflammation.

This is a brief account of the interplay of triumvirate in the vitiation process that may affect the whole body or part of it and the clinical phenomena of various disease-conditions that may be produced by this vitiation pathogenesis.

Having taken a bird's eye-view of the significant facts of

vitiation pathogenesis and co-related disease conditions produced by them we shall endeavour to study the vitiation pathogenesis, stage by stage, and its intricate details regarding beginning, gradual or sudden evolution, development and final termination so as to have a more intimate understanding of the pathological process which may guide the practical application of therapeutic measures. The importance given by the ancient authors to the complete study of the pathological process in the understanding of disease-condition becomes quite evident in the aphoristic statement of Caraka.

तस्योपलब्धिर्निदानपूर्वकालिङ्गोपस्यसंप्राप्तितः ॥ ६ ॥

च. नि. १, ६

“The knowledge of disease is obtained by the study of (1) Etiology, (2) Premonitory symptoms, (3) Signs and symptoms, (4) Homologatory signs and (5) Pathogenesis”. (Car. Nid. 1, 6)

Thus it is considered one of the five methods necessary for the diagnosis of disease-condition.

Moreover this fifth method is detailed and subdivided in various ways to have a thorough knowledge of pathogenesis.

सा संख्या प्राधान्यं विविक्कल्पकालविशेषैर्भिद्यते ॥

च. नि. १-१२/१

“Pathogenesis is again classified according to number, predominant morbid humor, mode of classification, minutia and period of exacerbation”. (Car. Nid. 1, 12/1)

The very word संप्राप्ति (Samprāpti) is indicative of all-comprehensiveness of the process of pathogenesis.

Suśruta divides the vitiation pathogenesis process in six stages: they are as follows:-

संचयं च प्रकोपं च प्रसरं स्थानसंश्रयम् ।

व्यक्तिं मेदं च यो वेत्ति दोषाणां स भवेद्भिषक् ॥ ३६ ॥

सु. सू. २१, ३६

“He who knows the various stages of pathogenesis viz., stage of accumulation (संचय), provocation (प्रकोप), diffusion (प्रसर), location

(स्थानसंश्रय), manifestation (व्यक्ति) and termination (भेद) is entitled to be a physician". (Suś. Sūtra. 21, 36)

1. The Stage of Accumulation (संचय)

The first stage of increase or accumulation of quality or quantity has been described fully in the chapter on Imbalance condition. Stage of decrease or hypo will only manifest the signs and symptoms of deficiency either in space or action; but the stage of increase has far-reaching effects. Increase shall have to be accommodated somewhere and the body being a limited space for accommodation or to bear the pressure of the extra matter or power, some irregularity or disorder occurs in the body; material increase being a static and localized thing, there may be local increase or growth of the particular tissue; it may disturb the neighbouring tissue and cause inconvenience by mechanical pressure. But increase and continued accumulation of dynamic force of the triumvirate which are all-pervasive and whose equilibrium is maintained on a very subtle fulcrum can be tolerated only to a limited stage which does not transgress the threshold of accommodative capacity of pentad of reserve foci. This stage may or may not produce actual disease condition but definitely serves as aid and predisposing condition to trauma or other etiological factors which act as immediate excitant to the triumvirate and herald the vitiation process, and usher in the incursion of disease condition. The general postulate of diagnosis of stages of increase and decrease of the function of triumvirate is described as follows:—

वाते पित्ते कफे चैव क्षीणे लक्षणमुच्यते ।
कर्मणः प्राकृताद्वा निर्वृद्धिर्वाऽपि विरोधिनाम् ॥५२॥
दोषप्रकृतिवैशेष्यं नियते वृद्धिलक्षणम् ।
दोषाणां प्रकृतिर्हानिर्वृद्धिश्चैव परीक्ष्यते ॥५३॥

च. सू. १८, ५२-५३

"Now the signs of decrease of Vāta, Pitta and Kapha are described to be decrease of their respective actions. There may be the loss of their normal functions or even the increase of contrary ones. Increase of natural actions is the position indicated in the increase of humors. The norm, the decrease and increase of humors are thus diagnosed." (Car. Sūt. 18, 52-53)

Suśruta describes some more definite premonitory symptoms when triumvirate imbalance is just on the threshold of vitiation. Recognition of these prodromal symptoms is given all importance by the author who considers this stage as the first or earliest therapeutic period.

एतानि खलु दोषाधानानि; एषु संचीयन्ते दोषाः । तत्र संवर्द्धहेतुस्तः । तत्र संचितानां खलु दोषाणां स्तब्धपूर्णकोटता पीतावभासता मन्दोष्मता चाज्ञानां गौरवमाकुर्यं चयकारणविद्वेष्येति लिङ्गानि भवन्ति । तत्र प्रथमः क्रियाकालः ॥१८॥

सु सू. २१, १८

"These are the seats of affection. In these the vitia get accumulated. The cause of accumulation has been already stated. The symptoms of accumulated vitia are: stiffness and fullness of abdomen (due to Vāta), yellow tinge of the skin (due to Pitta), low temperature, heaviness of limbs and lethargy (due to Kapha) and instinct of repugnance for the causative factors of accumulation of the respective vitia. This is the first stage for treatment." (Suś. Sūt. 21, 18)

Careful personal regimen and simple prophylactic measures will ward off completely or to some extent the incidence of disease condition, if the condition is recognised at this stage and treatment started.

II. The Stage of Provocation (प्रकोप)

This is the provocative reaction of the member of the triumvirate. This is generally subsequent to the triumvirate having reached the maximum point of increase or decrease and being at this moment irritated or provoked by an extraneous excitant etiological factor, endogenous or exogenous. This provocative reaction also may occur without previous imbalance condition if the immediate excitant factor is too strong for the triumvirate for adaptive reaction.

Incidence of additional pathogenetic factor to the already over-stressed and imbalanced triumvirate produces baneful poisonous or toxic effects on that body. Triumvirate come easily under the influence of these newly produced toxic effects, imbibe them, and get themselves intoxicated and thus become vitiated. Once vitiated, it loses self-control and forgets normal duties and functions. It becomes erratic, irregular, disorganized, abnormal and morbid in function. Saviour of the body becomes the sinner of the body.

It becomes a convert and an ally of the enemy. The hero of the physiology begins to play the part of the villain in the drama of pathology. It being itself vitiated, spreads the maleficent effects all over the body and causes vitiation of body-elements or body-channels wherever possible. When fully under intoxication or vitiation effects, it behaves as if possessed by the hostile excitant and does all the harm to its old master, the body.

This tragic conversion of the benevolent triumvirate into malevolent organization is the beginning of real vitiation pathogenesis. This provoked condition is indeed the initiation of disease condition and the stage of diffusion, location, manifestation and termination are the further development of the behaviour of the provoked vitium or vitia. If at the termination of this pathological process, vitiation effects are encountered successfully and nullified by the body vitality, the triumvirate is extricated from the pathological stage. Triumvirate then returns as the prodigal son and resumes his benevolent role of supporting the body.

Suśruta ascribes definite syndromes to the provocation stage of each of the triumvirate, and considers this stage to be the second in importance for the practical therapeutics. (Sūtra. 21, 27)

Vāgbhaṭa's definition of provocation is still more elucidating. He states :

कोपस्तुन्मार्गगमिता ।

लक्षणानां दर्शनं स्वेषामस्वास्थ्यं रोगसम्भवः ॥ अ. ह. सू. १२, २३

"Provocation is that stage when a vitium moves in a wrong direction and manifests symptoms of its morbid condition and the feeling of illness denotes the occurrence of disease." (Aṣṭ. Hrd. 12, 23)

III. The Stage of Diffusion or Pervasion of Vitiating Process (प्रसर)

Suśruta strikes an exceedingly astonishing concept when he tries to explain this process of diffusion (प्रसर).

अत ऊर्ध्वं प्रसरं वक्ष्यामः—तेषामेन्निरातकृत्विकोषैः प्रकृषितानां (पर्युषित) किण्वोदकपिष्ट-
समवाय इवोद्विक्तानां प्रसरो भवति ॥ सु. सू. २१, २८

"Now we shall describe the process of diffusion of vitiation process. Triumvirate provoked by the excitant etiological factors begin to increase just as the combination of rice-flour water and yeast give rise to increase (fermentation). And this increase naturally leads to overflow and spreading in the body". (Suś. Sūtra. 21, 28)

Suśruta compares this continuous process of increase to the phenomena of growth in yeast fermentation, thus anticipating by two thousand years the great discoverer of bacterial science, Louis Pasteur, who proved the truth of this concept to the world by physical methods. Equally astonishing is the biological postulate of growth and reproduction which in Caraka's words runs as follows:—

नाङ्कुरोपत्तिरबीजात् ।

च. सु. ११-३२

"There is no seedling in the absence of seed".

Which needed Virchow (1855 A. D.) and Flemming (1882 A. D.) to expound it again in the 19th century as important biological laws "Omnia cellula e cellula" and "omnis nucleus e nucleo" respectively and prove it by modern scientific means.

In this spreading stage, if the vitiating effects are too strong, the whole body may be overpowered and general or constitutional disease-condition will result.

If the vitiating effects are not so strong as to disable the whole body, it may continue to move in the body, just as clouds do in the sky, till they find sufficient attraction for settling or definite obstruction to proceed further and produce disease condition at that site.

Suśruta describes definite syndromes indicative of diffusive stage of each of the triumvirate and considers this stage as the third in importance from the therapeutic point of view (Sūtra. 21, 32)

IV. The Stage of Location (स्थानसंश्रय)

This location may occur at any and every place.

Suśruta says—

कृत्स्नेऽर्धेऽवयवे वाऽपि यत्राङ्गे कुपितो भूत्वा ।

दोषो विकारं नमसि सेवयन्नत्र वर्धति ॥

सु. सु. २१-२९

"Like the cloud in the sky, the vitium showers disease on the entire body or on a half of it or in whatever part or organ it is greatly provoked". (Suś. Sūt. 21, 29)

Caraka says—

सर्वाधिगात्राववस्थितत्वाद् ॥७॥

च. वि. १२-७

"Affecting either the entire body, or half the body or only one limb or region of the body." (Car. Cik. 21, 7)

Why does it get located at a particular place ?

Locus minoris resistentiae of the particular system-organ or tissue or obstruction in the body-channels may determine the location of the vitiating elements. This locus minoris resistentiae may be due to particular constitution of that system, organ, part or cell or it might be due to biological inferiority in growth or it might have been caused by damage to them, by previous trauma, stress, disease or otherwise.

Susruta explains the reason of Location thus:—

कुपितानां हि दोषाणां करीरे परिचायकम् ।

यत्र सङ्गः स्वैगुण्याद् व्याधिसङ्गोपजायते ॥१०॥

सु. सु. २४-१०

"Wherever the all-pervading vitia in their provoked state come into contact with an organ or tissue or part that is already impaired and hence susceptible, there occurs disease-phenomenon". (Suś. Sūtra. 24, 10)

Caraka also states in the same way the reason of location in one place.

क्षिप्यमाणः स्वैगुण्यादसः सज्जति यत्र सः ।

करोति विकृतिं तत्र खे वर्धमिव तेजसः ॥३७॥

दोषाणामपि वैवं स्यादेकदेशप्रकोपणम् ।

च. वि. १५, ३७

"The vitium pours down its vitiating element whenever it contacts a susceptible spot and causes disease-condition there as a cloud pours down rain in a favorable region. This is the mode of local provocation of vitia." (Car. Cik. 15, 37)

This stage of location is of great clinical importance for early diagnosis of disease condition.

Vitiation elements having attained foot-hold somewhere get gradually established therein and produce symptoms which will be indicative not only of the vitiation of the particular vitium or vitia, but also will be indicative of location or site (स्थान) where vitiation process has begun to spread. These combined symptoms help to localize the site of disease-condition. Suśruta, the master clinician, differentiates the symptoms produced during this stage of location of vitiation process as the definite premonitory symptoms (पूर्वरूपम्).

तेषामेवमभिनिष्ठानां पूर्वरूपशब्दोऽर्थः ; तं प्रतिरोगं वक्ष्यामः । तत्र पूर्वरूपगतेषु चतुर्थः
क्रियाकालः ॥ सु. सू. २१-३३

“The premonitory symptoms manifest when the vitiation process is located. From them the disease is recognised. This is the fourth stage of therapeutics.” (Suś. Sūt. 21, 33)

And this stage of location manifested clinically by definite premonitory symptoms is the fourth period of importance for therapeutic purpose.

V. The Stage of Manifestation (व्यक्ति)

Vyakti (व्यक्ति) is the stage of manifestation of actual disease condition. Suśruta correlates this pathological stage with the actual appearance of clinical phenomena of the disease.

अत ऊर्ध्वं व्याघेर्दर्शनं वक्ष्यामः ।

“We shall hereafter describe the actual manifestation of disease”

This disease condition may be a general disease or a systematic disease, or a disease of one part or limb according to the location of settling and establishing of the vitiation elements. This is the beginning of organic or structural changes in the body.

The disease-condition may be classified in two groups. general or local and both these groups, can again be subdivided into acute and chronic types.

A. General

1. Acute types (शीघ्रकारी):

If the vitiation elements are too strong, time and place very favourable to them, and the body constitution very weak or susceptible to disease condition, vitiation or morbid process spreads over the entire body very abruptly and the body is overpowered immediately. The body then succumbs completely and passes in full vitiation stage to be followed generally by dissolution.

Such conditions are described by Caraka as follows:

भगवन् ! दारुणं रोगमाजीविषविषोपसृजम् ।

विसर्पन्तं शरीरेषु देहिनामुपलक्षये ॥६॥

सहस्रैव शरास्तेन परीताः शीघ्रकारिणः ।

विनश्यन्त्यनुपक्रान्तास्तत्र नः संशयो मद्भान् ॥७॥

च. चि. २१, ६-७

“ O Worshipful one ! I see in the bodies of human beings a fell disease which spreads with the virulence of snake-venom. Those men who are attacked by this fulminating disease succumb to it speedily, unless treated promptly. Now concerning this disease, we are in great need of enlightenment”. (Car. Cik. 21, 6-7)

If after the immediate stunning, stupefaction and vitiation, the vital power of the body rises to the occasion and rallies all his anti-forces or anti-bodies (प्रत्यनीक) to save the situation, and extraneous factors of time and environment become helpful to the body, the issue takes the reverse turn and vitiation process becomes lessened and if the counter-action will continue successfully, the body with its triumvirate organization becomes free from vitiation altogether and the man survives. (Car. Cik. 3, 54-56)

2. Chronic types (दीर्घकालानुबन्धी):

The general disease condition may have periodical or chronic clinical course if the fighting forces on either side are nearly of equal strength. Fighting forces are vitiation elements versus body-constitution and body-elements; season, time and other environmental factors may be helpful to either side. Fluctuation in the strength of either side of the fighting forces or supporting help from extraneous sources

may cause abatement or aggravation of the disease condition. Such kind of warfare continues for a long time till one side gets sufficiently powerful to subdue the other. Caraka describes such oscillations in disease condition as under:

समत्पत्नीकः कुरुते कालवृद्धिश्चात्मकम् ॥

च. चि. ३, ६२

“The morbid toxic factors having opposition from the anti-bodies, cause remittent fever which periodically rises and remits”. (Car. Cik. 3, 62)

B. Local Disease Condition

If the vitiation process locates and gets established in a localized area, organ or tissue, the same phenomenon of encounter occurs but on a smaller scale and in limited space. Such localized reaction may also occur in the body without the previous internal vitiation process if that local part receives a powerful trauma—physical, chemical or biological from external source. These exogenous etiological factors are termed *Āgantuka* (आगन्तुक) to be differentiated from the endogenous ones which are termed *Nija* (निज). A long list of such exogenous and endogenous etiological factors is given in Caraka Samhitā. (Car. Sūtra. 18, 4 and 6)

The differential diagnosis between disease conditions produced by endogenous causes (निज) and by exogenous causes (आगन्तुक) is described by Caraka as under:—

आगन्तुर्हि श्रमपूर्वं समुत्पन्नो जघन्यं वातपित्तश्लेष्मणां वैषम्यमापादयति; निजे तु वातपित्तश्लेष्माणः पूर्वं वैषम्यमापद्यन्ते जघन्यं श्रयानमिति वर्तयन्ति ॥ च. सू. २०, ७

“The exogenous one begins with pain and later on leads to the discordance of Vāta, Pitta and Kapha. But in the endogenous one, discordance of Vāta, Pitta and Kapha occurs first and later on gives rise to pain”. (Car. Sūtra. 20, 7)

Fight in a localized area of the body has the advantage of receiving great help from the body in general. The entire body concentrates all his fighting forces at the war-site to give a regular pitched battle.

The local concentration of warfare phenomena makes the localization of disease area an easy task to the clinician. When the

regular pitched battle is decided at the site, all fighting forces and equipment are brought and concentrated at the spot. Thus the part becomes enlarged and appears swollen. There is an acute stage of whole atmosphere. All these signs of local warfare are easily observed by the clinician. It is a happy coincidence to find that the ancient clinicians both of the east and west have grouped these clinical appearances in four groups and described them as the classical signs of such local warfare reaction.

Caraka describes as follows:—

रुग्दाहरागतोर्दश्च विदग्धं शोफमादिशेत् ।

च. चि. २५, ५२

"The swelling which is characterized by pain, burning, redness and pricking pain should be diagnosed to be a suppurated swelling". (Car. Cik. 25, 52)

Similarly Celsus in A. D. 50 described calor, rubor, tumor and dolor as four cardinal signs manifesting the local phenomena of inflammatory reaction.

Caraka considers swelling (tumor) as the pathognomic of such conditions.

उत्सेधलिङ्गं श्वयथुं करोति । च. चि. १२-८

चक्र. टीका—उत्सेधेनाग्न्यभिचारिणा लिङ्गयत इति उत्सेधलिङ्गः ॥

"It causes edema with its pathognomic symptoms of swelling". (Car. Cik. 12, 8).

"It is marked by steady swelling, so it is edema with swelling". (Commentary by Cakrapāṇi).

And so such conditions are termed श्वयथु or शोथ in Āyurveda.

Suśruta calls this local phenomenon of swelling as एकदेशोत्थितः शोफः । (Suś. Sūtra. 17-3)

Clinicians in Greece gave dominance to the other signs viz., redness and heat and called this local phenomenon as inflammatory reaction, redness and heat being the qualities of the 'flame'.

This difference in dominance of particular signs in two countries may be an interesting subject to the student of ethnology. As race with Kapha constitution will react with swelling as more

prominent sign and race with Pitta will have heat and redness as more dominant signs.

(1) Acute inflammatory conditions:

The same process as it occurs in general disease condition takes place in localized disease condition but on a smaller scale.

It has the advantage of getting help from the body but it may put the whole body to a disadvantage if vitiation or morbid elements get an upper hand and crossing the limit of war-area spread in the neighbouring parts or in the whole body.

These are described as complications (उपद्रव) of local inflammatory reactions. Caraka mentions the following complications:

विसर्पः पञ्चधातश्च सिरास्तम्भोऽपतानकः ।
मोहोन्मादव्रणरजो ज्वरस्तृष्णा हनुग्रहः ॥
कासश्छदिरतीसारो हिका श्वासः सवेपथुः ।
षोडशोपद्रवाः प्रोक्ता व्रणानां व्रणचिन्तकैः ॥

च. वि. २५, २९-३०

"Acute spreading affection, hemiplegia, vascular thrombosis, convulsions, stupefaction, insanity, acute pain in the wound, fever, thirst, lock-jaw, cough, vomiting, diarrhea, hiccup, dyspnea and tremors are the sixteen complications of wounds, described by the specialists in the subject of wounds". (Car. Cik. 25, 29-30)

The local disease conditions terminate in the same way as the general disease condition. But the results are less serious. Resolution and dissolution of the local part indicate the success or failure of the body in the encounter.

(2) Chronic Inflammatory Condition:

When the fighting forces are nearly equi-balanced, prolonged war with fluctuation on either side continues till some decisive factor comes in aid of either party and concludes the scene of warfare. This is considered the fifth best of the therapeutic period. Though it is late, it is better than too late which is the sixth or last period of treatment as the terminating stage of the disease.

We shall now give some of the comparative data of description of such local inflammatory processes found in Āyurveda and modern medical treatise.

Inflammation—Variation in Intensity of Classical signs is due to the Domineering Action of Particular Vitium

Celsus in A. D. 50 described the four cardinal signs manifesting the local phenomena of inflammatory reaction. They are calor, rubor, tumor and dolor and they were co-related with the four humors of the microcosm i. e., body-constitution, the four corner-stones in the humoral pathology of Hippocrates; these were again correlated to the four proto-elements of the macrocosm i. e., the world as described by the philosopher-physician Empedocles who regarded these four proto-elements as the roots of all things.

In India macrocosmic and microcosmic concept was of a triad; but practical surgeons often found blood which is rather a structural system more convenient and useful in diagnosis and treatment specially of local disease-conditions. Suśruta thus tried to give nearly the same status to blood as to triumvirate and described four categories

आरिःसंवत्तमान्भूता वातपित्तकफशोणितसन्निपातवैषम्यमिमिताः । सु. सू. १, २५

"The diseases pertaining to the body have their origin in food and drink ingested, on account of the vitiation and discordance of Vāta, Pitta, Kapha and the Blood". (Suś. Sūt. 1, 25)

While commenting on this verse, Dalhana gives the following explanation for including Blood in the categories of constitutional classification

व्रणे च दूष्येषु मध्ये रक्तस्य प्राधान्यमिति शोणितोपादानम्—इकहण्टीका

"The Blood is included because in a wound there is the dominance of blood among the vitia". (Commentary by Dalhana)

Suśruta clarified this point by stating that blood is secondary to and dependent upon the primary triumvirate of vital categories.

यस्माद्रक्तं तिना दोषैर्न कदाचिद् प्रकुपयति । सु. सू. २१, २५

"Because the blood is never provoked without the vitia". (Suś. Sūt. 21, 25)

Blood (रक्त) is included under the Pitta category when the three vital categories are taken in consideration.

पित्तवच्छेदितजः (शोकः) । सु. सू. १७-४

“That born of Blood is like that of Pitta”.

पित्तवद्रक्तसमुत्थं जानीयात् । सु. सू. २२-११

“That born of Blood is to be known like that of Pitta”.

It is really interesting to find that equal importance is given to the description of inflammation in Suśruta Saṃhitā, a treatise on Surgery, as is done in the modern surgical text books. In both we find that the description of diseases is initiated with this subject and a large number of chapters is devoted in each to give detailed and exhaustive description of this inflammatory phenomenon in general. Nearly 1/15 of the text in each, deals with this pathological process alone. Suśruta concludes this subject by generalization of the local pathological process in the following words.

न केवलं व्रणेषूक्तो वेदनावर्णसंग्रहः ।

पर्वशोफविकारेषु व्रणवल्लक्षणे द्वयम् ॥१३॥

सु. सू. २२, १३

“This summary of the types of pain and color is not limited only to wounds but is applicable to all types of inflammation. Hence the physician should regard all inflammations like wounds.” (Suś. Sūt. 22, 13)

Classification of a subject may be made from various points of view to help the understanding of the subject.

Modern surgical text books classify inflammation generally in the following types.

- A. Acute or subacute.
- B. Acute or Chronic.
- C. Parenchymatous or Interstitial.
- D. Serous-Catarrhal-Fibrinous-Hemorrhagic or Suppurative.

These classifications are done either according to the intensity of the process, or to the time it takes to develop, or according to the

tissues it attacks or the exudation which it gives rise to.

Āyurveda classifies the inflammation in three groups of constitutional triumvirate.

This triumvirate classification has greater significance in clinical diagnosis and practical therapeutics. It is done from clinical-pathological-cum-physiological point of view.

If the etiological factor is excitant of a particular vitium, or any particular vitium of the constitution is predisposed to disease condition, the signs and symptoms characteristic and pathognomic of that particular vitium will be more dominant than the signs of other two vitia.

If two vitia are dominant and acting in combination, signs of two will be manifested dominantly. If all three, all signs will be aggravated.

The pathognomic signs of each of triumvirate are as follows:-

गुलं नर्तेऽनिलादाहः पित्ताच्छोकः कफोदयात् । ॥६॥

रागो रक्ताच्च पाकः स्यादतो दोषैः संशोणितैः ॥ अ. ह. सू. २९, ६

“There is no pain without Vāta, and burning without Pitta and no swelling without Kapha; nor is there redness and suppuration without blood. These are the respective signs of the vitia and the blood”. (Aṣṭ. Hṛd. Sūtra. 29, 6)

Vāta—pain (dolor).

Pitta and blood—heat and redness (rudor) (calor).

Kapha—swelling (tumor).

These four signs correspond very closely to the triple response of Thomas Lewis. It is the clinical experience of every physician and surgeon that there is wide variation in intensity and rate of development of these classical signs. This can be well explained if we understand the full concept of Vaso-neurotic constitution (वृषानवृत्त).

The phenomenon of inflammatory reaction is the resultant of the action of etiological excitant and reaction of Vaso-neurotic

constitution. Threshold of contraction and dilatation of arterioles and capillaries vary in each individual and also the capillary permeability. This is due to Vaso-neurotic individual constitution.

Thus Vaso-neurotic constitution of the individual plays an important part in the phenomena of Inflammation; Krogh while describing the Vaso-neurotic constitution declares:

"I shall say, finally, a few words about the so-called Vaso-neurotic constitution.

It is characterized by the great lability or downright instability of the innervation of the vascular system which manifests itself in the capillaries as well as in the arteries. Frequent changes in the innervation occur either spontaneously or from comparatively trivial causes."

The REDNESS is brought about by opening up and dilatation of capillaries and venules, the HEAT by the increased flow of blood due to dilatation of arterioles, and the SWELLING by exudation of fluid from vessels due to their increased permeability, and the PAIN finally by the stimulation of nerves.

Though these reactions occur in the interest of the body, it is possible that some of the reaction if occurring in excess may often be harmful; similarly some occurring poorly may not be of effective use. The knowledge of constitutional tendency of the man as a whole as of the Vaso-neurotic constitution of the local organ or part affected and also of the particular exciting action of the etiological factors may help to control or rectify this protective and restorative reaction to the best advantage of the body. Here is the need of the study of the constitutional triumvirate. Triumvirate concept may open up a subtler field of research in the action of etiological factors as well as behaviour of body tissues.

VI. The Stage of Termination (निवृत्ति)

This is the end or termination of the vitiation process. In general disease-condition the person may completely recover if his body vitality can counteract the incursion successfully or may suffer

dissolution if the invading forces are too powerful for his body vitality.

If any of them is not able to subdue the other totally and bring about decisive conclusion, the disease condition may persist for a prolonged period.

Similarly in local disease condition too, there may occur complete resolution or dissolution or death of the local part (Necrosis, gangrene or ulcer). Local disease condition has one special method of termination and disposal or elimination of waste or morbid matter. It is the process of suppuration.

स यदा बाह्याभ्यन्तरैः क्रियाविशेषैर्न संभावितः प्रशमयितुं क्रियाविपर्याद्वहुत्वाद्वा दोषाणां तदा वाकामिमुखो भवति । सु. सु. १७, ५

"It tends to suppurate if it is not possible to sedate it by special external or internal treatment, or if the treatment given is wrong or if the morbidity is in excess." (Suś. Sut.: 17, 5)

This will end in producing the condition of (व्रण) wound.

If the conclusive termination is not brought about by either party being subactive and not able to subdue totally the other, the chronic inflammatory condition or chronic wound condition such as fistula or sinus (नाडीव्रण) may continue for a long period.

This is the last or sixth stage of therapeutic period advised by Suśruta.

The description of various stages of vitiation pathology ends with a verse that explains the reasons of thorough study and diagnosis of each stage from practical therapeutic point of view. Treatment started in the earlier stage will be easier and simpler than if started late when vitiation process has gained strength and intensified.

संचयेऽपहृता दोषा लभन्ते नोत्तरा गतीः ।
ते तूत्तरास्तु गतिषु भवन्ति बलवन्तः ॥ सु. सु. २१, ३७

"Vitiation process checked or subdued in the accumulation process, fails to produce any further development; but allowed to

progress, it gains in strength and intensity in the course of its further development". (Suś. Sūtra. 21, 37)

The principles of treatment during the vitiation process are formulated primarily with a view to eliminate or get rid of the vitiated morbid matter resulting from the pathological processes and accumulated in the body. For the purpose of such elimination, the nearest and simplest outlet or body-channel was chosen. Thus came into practice the treatment known as the pentad of eliminatory or purificatory procedures. (पञ्चकर्म).

Caraka declares:-

उपस्थिते स्नेहपित्ते व्याधवासाशयाश्रये ।

वमनार्थं प्रयुज्जीत मिषगदेहजडूयन् ॥

च. सु. २, ८

"These drugs should be used as emetics by the physician, in a way not harmful to the body, in gastrogenic disorders characterized by morbid accumulation of Kapha and Pitta". (Car. Sūt. 2, 8)

पक्वालयगते दोषे क्षिरेकार्थं प्रयोजयेत् ।

च. सु. २, १०

".....should be prescribed for purgation when the morbid humors have accumulated in the colon". (Car. Sūtra 2, 10)

This purificatory therapy was put into operation in a rather strong degree in order to accomplish the complete elimination of the morbid matter. The procedure required that the body be previously prepared, before undergoing such a strong method of treatment, by oleation (स्नेहन) and sudation (स्वेदन) procedures. These procedures facilitated the easy elimination of morbid matter. Caraka says—

स्नेहोऽनिलं हस्ति मृदूकरोति

देहं मलानां विनिहन्ति सङ्गम् ॥७॥

स्निग्धस्य सुक्ष्मेष्वयनेषु लीनं

स्वेदस्तु दोषं नयति प्रवत्नात् ।

च. सि. १, ७

"Oleation cures the morbidity of Vāta, makes the body soft and disintegrates the accumulation of morbid matter, while sudation liquefies the morbid matter which is stuck up in the minute channels of the body of the person who has undergone oleation therapy". (Car. Siddhi 1, 7)

When the body is found to be not fit and intolerant of such a radical treatment, the line chosen was to bring about the gradual digestion of the morbid matter (दोषशक), a concept so similar to the detoxication—conjugation concept of modern physiology. The liver is believed to play an important part in protecting the organism from various toxic substances. This detoxifying function is believed to involve the process of oxidation and conjugation into relatively non-toxic substances which are subsequently eliminated in the bile and the urine.

लङ्घनं स्वेदनं कालो यवावस्तिकको रसः ॥१४२॥

पाचनान्यविपकानां दोषाणां तरुणे ज्वरे ॥

च. चि. ३

“In the early stage of fever starvation, sudation, time-effect, diet of gruels and articles of bitter taste, digest the imperfectly digested morbid matter in the body”. (Car. Cik. 3, 142)

After the complete riddance from morbid matter, the treatment consists in supplying the deficit and strengthening the body vitality by drugs as well as dietetic regimen. This process is called rehabilitation (वैसर्जन). (Car. Sūtra. 15, 16)

Some more Concepts of Pathological Conditions or Processes in Ayurveda

We shall now review briefly the concepts the ancients held regarding the following pathological conditions or processes.

1. The concept of epidemic and pandemic diseases.
2. The concept of sources and spread of infection or contagion.
- 3-4. The concept of growth and multiplication of morbid elements in the body and their mode of spread and action.
5. Certain abnormal conditions of the body-appearance.

The Concept of Epidemic and Pandemic Diseases (जनपदोद्भूत)

In epidemic diseases they observed that the constitution of the body is not able to play any part in counter-acting the

incursion of infesting elements. The etiological factor has all the voice in the disease-phenomena. Hence the uniformity of symptoms and clinical courses observed as the etiological factor, is uniform. Constitution which is an individual concern is out of game, hence very little individual variation can occur in the clinical picture and course of the disease. In chronic diseases, individual constitution is able to create resistance and in such condition pronounced individual differences in the clinical course can occur.

Caraka Samhitā devotes one chapter to explain the concept of Epidemiology (Vimāna 3). It is a thought-provoking concept and probably progress in radiation physics may be able one day to find the equivalence in value between the physical and spiritual universe and rediscover the truth laid down by Ātreya.

We shall cite now the passages that explain the reasons why a large number of people are affected by a common ailment at one and the same time and why there is uniformity of clinical course of disease in spite of the individual variations of constitution in men and what are the main sources of such ailments. Caraka in Vimāna 3 treats the subject thus:

"5. But, how does the simultaneous destruction of communities, consisting as they do of individuals who differ from one another in constitution, diet, physique, vitality, habits, psychic make-up and age, take place by the incidence of one single disease.?

6-(i). Unto him replied the worshipful Ātreya, O, Agniveśa! though a community may be heterogeneous in respect of the constitution etc., of its individual members, there are other common factors which being adversely affected will cause simultaneous outbreak of diseases having similar symptoms. It is these that devastate whole populations.

6. The factors that affect a people in common are: the winds, the waters, the country and the seasons.

7-(i) of these, the wind, if of the following description, is to be known as disease-inducing viz., unseasonal, totally becalmed, violently blowing, exceedingly rough, intensely cold, intensely hot,

excessively dry, excessively humid, fearfully clamorous, blowing from contrary directions and clashing with itself, extremely rotatory (whirlwind), and charged with unwholesome odors, moisture, sand, dust and smoke.

7-(ii). The water of the following description is to be known as bereft of virtue; having an extremely aberrant smell, color, taste and touch; abounding with putrescent matter; deserted by aquatic birds; in which the aquatic creatures are atrophied and which is unpleasant.

7-(iii). The country of the following description is to be known as unwholesome; having color, taste and touch that are unnatural; excessively damp; abounding in serpents, beasts of prey, mosquitoes, locusts, flies, mice, owls, birds and animals such as the jackal and abounding in woods of weeds and Ulūpa grass; abounding in creepers where crops have either fallen, withered or been destroyed in an unprecedented manner; where the winds are smoky; where the sound of birds is unceasing; where the baying of dogs always assails the ears; where herds of animals and flocks of birds of various kinds are always in a state of alarm and pain; where amidst the people, morality, truth, modesty, custom, character and virtue have either declined or been given up; where the waters are always agitated and upheaving; which is frequently subjected to the incidence of meteorites, thunderbolts and earthquakes, where nature is full of menacing sounds and sights; where the sun, the moon and the stars are frequently covered by dry, coppery, ruddy and grey clouds and which lastly, is as if full of constant alarm and lamentation, crying, fright and darkness as if visited by gnomes, and as if abounding in sounds of lamentation.

7-(iv). A season which is of the following description is to be known as unwholesome; evincing characteristics that are opposite to normal; or evincing its characteristics in an excessive or deficient degree.

7. The learned declare these very four factors when possessed of the morbidity described above, to be destructive of

populations; when not so blemished they are said to be wholesome.

8. But even when these depopulating factors have turned inauspicious, there is no fear of diseases to those persons who are served with medicines that have been culled beforehand.

12. Even if all the four factors including Time, become vitiated, as long as men are sustained by medicines, so long will they remain free of disease.

14. For them moreover, the rightful use of vitalizing medications is recommended; the maintenance of the body by means of the medicinal herbs culled beforehand is also commended. (Car. Vimāna 3, 5-14)

2. The Concept of Sources and Spread of infection or Contagion

A. Sources of Infection or Contagion

Regarding the sources of infection in epidemic diseases Caraka lays down that the wholesale vitiation of the air, water, country and season are the sources of vitiation.

ते तु खल्विमे भावाः सामान्या जनपदेषु भवन्ति, तद्यथा वायुः, उदकं, देशः, काल इति ॥

च. वि. ३, ६

"The factors that affect a people in common are the winds, the waters, the country and the season". (Car. Vim. 3, 6)

इमानेवंदोषयुक्तांश्चतुरो भावाज्जनपदोद्ध्वंसकरान् वदन्ति कुशलः अतोऽन्यथाभूतास्तु हितानाचक्षते :

च. वि. ३, ७

"The learned declare these very four factors when possessed of the morbidity described above, to be destructive of populations; when not so blemished, they are said to be wholesome". (Car. Vim. 3, 7)

Sūśruta states that epidemic diseases spread from man to man.

कुष्ठं उदरश्च शोषश्च नेत्राभिव्यन्द एव च ।

औपसर्गिकरोगाश्च संक्रामन्ति नराक्षरम् ॥

सु. नि. ५, ३४

"Dermatosis, fever, consumption and eye-sore are infectious diseases and spread from man to man." (Sūś. Sūtra 5, 34)

It will be interesting to note that Dalhana, the commentator who flourished in about 10th century A. D. while commenting on this verse, quotes शीतलिकादयः (small pox etc.) as examples of ज्वरसर्गिक i. e., communicable diseases. The term ज्वरसर्गज is defined as follows by Dalhana: ज्वरसर्गजा ज्वरादिरोगपीडितजनसंपर्काद्भवन्ति । "Infectious diseases are those fever etc. that result from contact with those ailing from them."

The words संसर्गज-ज्वरसर्गज-सन्धारिणः used in connection with such communicable disease-condition, are quite suggestive and significant.

B. The Method of Communication of Infection

Caraka states :

तत उद्ध्वंसन्ते जनपदाः स्पृश्याभ्यवहार्यदोषात् । च. नि. ३, २०

"In consequence, the people perish as the result of infectious contact or ingestion"

Cakrapāṇi, the learned commentator, explains this further as under:—

स्पृश्याभ्यवहार्यदोषादिति स्पृश्यस्य वा जलादेरभ्यवहार्यस्य च कृत्स्नस्य दुष्टत्वात् । एतच्च प्राधान्येन ज्ञेयं; तेन दुष्टपचनगन्धदोषोऽपि ज्ञेयः । असात्स्न्यगन्धोऽपि दुष्टत्वात् उक्तः ।

"As regards contact and ingestion; by contact, that of infected water etc., is meant, and by ingestion, that of all infected articles of diet is meant. This is the primary sense. Generally even infected smell of the air is to be included, for unwholesome odor is said to be due to infection of the atmosphere."

Suśruta gives a more detailed account of mode of communication of disease.

प्रसङ्गाद्वायुसंस्पर्शान्निःश्वासास्सहभोजनात् ।

सहस्ययासनाद्यापि वस्त्रनाल्यानुलेपनात् ॥

कुष्ठं ज्वरश्च क्षोषश्च नेत्राग्निमध्यन्द् एव च

ज्वरसर्गिकरोगाश्च संक्रामन्ति नराक्षरम् ॥ सु. नि. ५, ३२-३३

"It is by close conversation, body-contact, breath-contact, eating together, using the same bed, seat, clothes, flower-garlands and toilet, that infectious diseases such as dermatosis, fever, consumption and eye-sore spread from man to man." (Suś. Nid. 5, 32-33)

3. Concept of Growth and Multiplication of Morbific elements in the Body And their Mode of Spread and Action

Suśruta compares the growth of vitiating elements to yeast fermentation which has already been explained in the chapter of vitiating pathogenesis (Suś. Sūtra 21, 28). Here the simile of yeast fermentation used to explain the increase of growth of morbid elements is quite suggestive.

Caraka seems to have a clearer awareness of the biological factor involved in the vitiating elements. He refers the phenomenon of the periodicity of fever to the recurring cycles of growth, spread, spending itself out and withdrawal of the vitiating element. This description agrees fully with the cycle of evolution of malarial parasite in the human body. Caraka illustrates this by using the simile of the seed and the soil.

अधिशेते यथा भूमिं बीजं काले च रोहति ।
अधिशेते तथा धातुं दोषः काले च कुप्यति ॥६८॥
स वृद्धिं बलकालं च प्राप्य दोषस्तृतीयकम् ।
चतुर्थकं च कुहते प्रस्थनीकबलक्षयात् ॥६९॥
कृत्वा वेगं गतबलाः स्वे स्वे स्थाने व्यवस्थिताः ।
पुनर्विवृद्धाः स्वे काले उद्वरयन्ति नरं मलाः ॥७०॥

च. वि. ३. ६८-७०

“Just as the seed lies dormant in the soil and germinates in season, in the same manner the toxic matter lies quiescent in the body-element and flares up when the time is ripe.

Thus the morbid factor gathering strength and biding the propitious time, manifests itself as the tertian or the quartan fever as soon as the disease-resisting power in the body is lowered.

In this manner, the disease-generating factors, having worked themselves out, lapse into quiescence and retire to their respective stations in the body; then mustering up their strength, once again, these toxic elements afflict the patient with fever at their own ripe times”. (Car. Cik. 3, 68-70)

As the seed begins to grow at its proper time so does the morbid factor. Morbid factor having increased in amount and gaining strength and getting the favourable time for action and not being counter-acted by anti-bodies, causes the disease symptoms. Having expended all the power and getting powerless it reconciles or returns to its original soil and growth, and repeats the cycle of growth, spread, action and return.

(4) Certain Abnormal Conditions of Body-appearance

They had observed certain abnormalities in appearance of the persons who were otherwise living in good health. So these conditions are not grouped under the disease list but they are described in a separate chapter just after the enumeration of all the disease conditions.

The eight censurable body conditions described therein are as follows:—Obesity or Tenuity, Dwarfism or Gigantism, Albinism or Pigmentation and Hirsuties or Baldness. (Car. Sūtra. 21-3). These are probably connected with some abnormality of the function of Glandular system of the body. The body has however adjusted to live in health.

X. IMPORTANCE OF KNOWLEDGE OF CONSTITUTION OF THE BODY IN THE STUDY OF DISEASE CONDITION AND PRACTICAL THERAPEUTICS

- (1) Significance of Constitutional Factors in the Etiology of disease.
- (2) Significance of Constitutional factors in the Clinical course of disease.
- (3) Significance of Constitutional factors in prognostics.
- (4) Significance of Constitutional factors in practical Therapeutics.

1. Significance of Constitutional Factors in the Etiology of Disease

If the balance-constant of the vitium which is dominant in the constitution of the individual is placed on a higher threshold the person is more sensitive or affective to the etiological factors which are the excitants of that particular vitium. The threshold of tolerance is transgressed even by a smaller degree of exciting factors. This is the relative condition of predisposition or susceptibility.

The constituent vitium whose threshold of sensitivity or affectivity is on a lower level, will require unusually a larger degree of exciting factors to manifest disease condition. This is the relative condition of immunity.

Caraka states :

तत्र वातलस्य वातप्रकोपणान्यासेवमानस्य क्षिप्रं वातः प्रकोपमाद्यते, न तथेतरी दोषौ । च. वि. ६, १६
पित्तलस्यापि पित्तप्रकोपणान्यासेवमानस्य क्षिप्रं पित्तं प्रकोपमाद्यते, न तथेतरी दोषौ । ,, वि. ६, १७
श्लेष्मलस्यापि श्लेष्मप्रकोपणान्यासेवमानस्य क्षिप्रं श्लेष्मा प्रकोपमाद्यते, न तथेतरी दोषौ । ,, वि. ६, १८

“In a person of the Vāta habitus who is given to indulgence in Vāta-provoking things, the Vāta is readily aggravated; not so the other two humors’.

Similarly in the Pitta patient, who is given to the indulgence of Pitta-provoking things, the Pitta is readily aggravated; not so the the other two humors.

Similarly in the person of Kapha habitus given to indulgence in Kapha-provoking things, Kapha is readily aggravated; not so the other two humors”. (Car. Vim. 6, 16-18)

II. Significance of Constitutional Factors in Clinical Course of Disease

Caraka Samhitā gives a succinct but a clear account of the part constitution plays in the production of the clinical picture of the disease and lays down as a general clinical law that manifestation of actual disease condition is the resultant of the varying interaction of the etiological factors, the triumvirate of constitution and the body-tissues.

इह खलु निदानशेषदूष्यविशेषेभ्यो विकारविघातभावाभावप्रतिविशेषा भवन्ति । यदा ह्येते त्रयो निदाना-
विशिष्टाः परस्परं नानुबध्नन्त्यथवा कालप्रकर्षाद्वलीयांशोऽथवाऽनुबध्नन्ति न तदा विकाराभिनिर्वृत्तिः,
चिराद्वाऽप्यभिनिर्वर्तन्ते, तन्मो वा भवन्त्यथोक्तसर्वलिङ्गा वा; विपर्यये विपरीताः, इति सर्वविकारविघात-
भावाभावप्रतिविशेषाभिनिर्वृत्तिहेतुर्भवत्युक्तः ॥

"Here we shall describe the suppression or the incidence of the disease which occurs as a result of the variations in the etiological factors, intensity of morbid humors and susceptibility of the body elements.

If these three factors, mainly the etiological factors etc., do not mutually associate or support, or if they do so after a long lapse of time, or in a very mild form, either there occurs no manifestation of the disease at all or the disease takes a long period to evolve, or appears in an ambulatory or abortive form. Under the contrary conditions, there occur contrary results. Thus are laid down the different causes of the modes of incidence or suppression of all diseases". (Car. Nid. 4, 4)

Concerning the resultant of the encounter of etiological factors with the vitia and susceptible body tissues, the author describes the following possibilities:—

1. If the etiological excitant and constitutional vitia and body tissues are not mutually agreeable at all, that is the excitant factors and vitia are of the opposite types and the body tissues are resistant or more or less immune to them, then there does not occur any manifestation of disease-condition. (न विकाराभिनिर्वृतिः। no manifestation of disease-condition).

2. If the excitant and vitia and body tissues are mutually agreeable but all of them are so mild or weak that all combined together do not suffice to produce a full disease condition, there will be manifestation of a mild, abortive or ambulatory type of disease condition. (उन्मो विकारा भवन्ति—अणुविकारजनम्। mild or latent or ambulatory type of disease-condition).

3. If mutual agreement and combination of all these three factors are gulfed by a long interval, there will be a delayed development of disease. The disease condition has a prolonged clinical course. Incubation period is long and clinical course is chronic or prolonged. (चिरेण जननम्—chronic disease condition).

Under the above-mentioned two conditions the disease does not run a fixed, regular or constant clinical course. It rather manifesta

diversified clinical pictures. It may not manifest all the classical symptoms of the disease condition, or it may manifest them in irregular way. There may not be orderly sequence maintained in the development of symptoms or the symptoms may be intensely manifested in one part of the body tissue or system and there may be no symptoms at all in other parts; or manifestation of symptoms may be delayed or prolonged. (अथोक्तसर्वलिङ्गः। Manifestation of symptoms in an irregular way).

4. If the etiological exciting factors, constitutional vicia and the body tissue are mutually agreeable, there will be full development of the disease condition manifesting all classical symptoms in due order of time and in degree of intensity giving a text-book-type picture of the disease-condition. (यथोक्तसर्वलिङ्गः। Disease condition with typical manifestation of symptoms).

5. If the etiological excitant is more severe and acute, the vicia just on the threshold of excitement, and body tissues quite predisposed, the result is the manifestation of very acute or even fulminant type of disease condition which runs a very acute course and there is great exaggeration of general or local symptoms. (शीघ्रं निर्वर्तमाना महान्तो यथोक्तसर्वलिङ्गाः। Disease conditions with acute or grave clinical course manifesting all symptoms).

These are the general postulates of manifestation of clinical course in any disease condition. Constitutional factor being an individual factor, there will always result individual differences in the clinical picture course and termination of the disease.

Epidemic

There are some disease conditions where constitutional factors are unable to play any part or counteract the incursion of the etiological factors. Caraka describes such a state of things to occur in epidemic and pandemic diseases (जनवशोद्भवस) where the incursion is so strong, powerful and sudden that the constitutional factors are not able to counteract at all, and so all people with varying constitution suffer simultaneously from a severe type of disease condition and run nearly uniform clinical course.

समानकालाः समानलिङ्गाश्च व्याधयोऽभिनिर्वर्तमाना जनपदमुद्ध्वंसयन्ति ॥ च. वि. ३, ३

"There are other common factors which being adversely affected, will cause simultaneous outbreak of diseases having similar symptoms. It is these that devastate whole populations". (Car. Vim. 3, 6)

These postulates can well be interpreted in simple mathematical formula as under:—

$$\text{Disease} = \frac{\text{Etiological factors}}{\text{Vitia and body-tissues}}$$

III. Significance of Constitutional Factors in Prognostics

Caraka gives great consideration to constitutional factors in foretelling the prognosis. Constitution is given equally an important place in the branch of prognostics by Hippocrates. Caraka emphasizing the value of the knowledge of prognostics to the physician to attain full success in practice, states:

साध्यासाध्यविभागज्ञो ज्ञानपूर्व चिकित्सकः ।

काले चारमने कर्म यत्तत् साधयति श्रेयम् ॥

च. सू. १०, ७

"The physician who knows the differential diagnosis between the curable and the incurable diseases and begins treatment with full knowledge of the case and in time, obtains success for his effort without fail". (Car. Sūt. 10, 7).

He divides the disease condition in four categories from prognostic point of view.

सुखसाध्यं मनं साध्यं कृच्छ्रसाध्यमथापि च ।

द्विवधं चाप्यसाध्यं स्यादाप्यं यच्चानुपक्रमद् ॥

च. सू. १०, ९

"The curable diseases are of two kinds: those that are easily cured and those that are cured with difficulty. The incurable diseases also fall into two categories: those that are palliable and those that are absolutely irremediable". (Car. Sūt. 10, 9)

Constitutional factors play an important part in determining these four prognostic categories; moreover the knowledge of constitutional factors helps the physician to some extent to know the prognosis

and thus enables him to fore-arm and prepare for future line of treatment of disease-condition.

IV. Significance of Constitutional Factors in Practical Therapeutics

The diligence of the skilful clinicians who previously determined the exact role played by each viz., etiological excitant, constitutional triumvirate and nature of body-tissue, becomes fully fruitful when practical therapeutics are to be prescribed.

The text books of modern medicine prescribe treatment for Homo-sapiens in general giving the limit of minimum and maximum dose which can be safely administered to man without harm. This is the scientific formula worked out fully by experimental and observational methods and properly standardized, and is hence all-essential for correct guidance and is valid for the average. But practical application and use of this scientific knowledge in the best interest of each individual is the real art of medicine.

All the achievements of the practical knowledge of disease or drugs or even diagnostic skill, will be to no purpose if it is not combined with practical art of scientific application of therapeutic measures which alone can bring the full success in treatment.

Caraka states this very forcibly:

मात्राकालाश्रया युक्तिः सिद्धिर्युक्तौ प्रतिष्ठिता ।

लिप्युपरि युक्तिज्ञो द्रव्यज्ञानवतां सदा ॥

च. सू. २, १६

‘The art of prescription depends on the knowledge of dosage and time, and on this art, in turn, depends success; hence the skilful physician stands ever superior to those possessing merely a theoretical knowledge of drugs’. (Car. Sūtra. 2, 16)

It is essential to understand and study environmental etiological excitant but the knowledge of individual constitution of the patient which plays such an important role in the phenomena of disease is not only equally necessary but rather an indispensable pre-requisite to the exact determination of the dose for that particular stage of disease in that particular constitution of man.

It is hardly necessary to emphasise the need for meticulous accuracy in dosage as deviation on either side fails to produce fully the desired results. A small dose is not sufficient to counteract the disease condition while larger dose may produce excessive effects on the body and may even be harmful to the body at times.

सहसा ह्यतिबलमौषधमपरीक्षकयुक्तमल्पबलमातुरमतिपातयेत् । तथा बलवति बलवद्द्व्याधिपरिगते स्वल्पबलमौषधमपरीक्षकयुक्तमसाधकमेव भवति । च. वि. ८, ९४

"A rash administration of a very strong medication without examination, on a weak patient, will upset him.

But in strong persons affected with a strong disease, weak medicine administered without examination becomes useless". (Car. Vim. 8, 94)

The keenness in Āyurveda regarding the accuracy in dosage becomes too evident even in the term मात्रा meaning measure, which has been selected for denoting dosage; the word मात्रा is derived from the root 'मा to measure,' thus significant stress is laid on accurate measuring.

While the word Dose is derived from Greek (doses-didomi=give) which is cognate to the Sanskrit root (दा=to give) where the significant meaning is mere giving.

And to attain accuracy in dosage is the main purpose of the detailed study of the constitution of triumvirate.

दोषादिमानज्ञानायत्तत्वाद् क्रियायाः ।

च. वि. १, ३

"Treatment depends on the accurate recognition of the measure of humors and the other factors". (Car. Vim. 1, 3)

The significance of knowledge of constitution in determining the personal regimen of the individual has already been described. (Car. Sūtra 1-62).

To attain the ideal of easy comprehension combined with exactitude, the ancients reduced the therapeutic science nearly to mathematical formula.

Ingestion of food and drug was the sole method of administration at that time; and hence taste (रस) which was the main index, was grouped into six categories to fit easily with the three categories of triumvirate of constitution, and they evolved further the general formula co-ordinating each of the triumvirate with a group of three of the taste categories. One group of three increasing and the remaining other group decreasing the force of each of the vitia. (Car. Vim. 1, 6)

The mathematical formula concerning Doṣa (दोष) and Rasa (रस) did not end here. As Doṣa was worked out by combination and permutation method to 63 forms, so Rasa (रस) was also worked out to 63 forms by the same method. (Car. Sūtra. 26, 22)

Rasa (रस) was also considered in its वर and वम comparative and superlative state as was Doṣa (दोष) considered. (Car. Sūtra. 26, 23). Thus रसदोषविमान specific determination of Rasa and Doṣa and reducing them to mathematical formula of inter-relation is the most significant attainment of exactness in practical therapeutics conceived and achieved by the ancients. Caraka who devotes one full section विमान Vimāna of 8 chapters to this specific determination of all details of various factors concerned in production of disease as well as the factors important in diagnosis and treatment, discusses this interrelation of (रस and दोष) Rasa and Doṣa in great detail in the first chapter of Vimāna and thus emphasizes the great importance of accurate knowledge of constitutional factors (दोषविमान) for practical therapeutics.

The following remark of the great physician William Osler well emphasizes the importance of constitutional factors in the clinical manifestation of disease. It gives the inter-relations of the soil and the seed.

The Soil

"Many years ago I drew the parallel between infection in tuberculosis and the parable of the sower, which though now somewhat hackneyed illustrates in an effective way the importance of the nature of the ground upon which the seed falls. 'Some seeds fell by the wayside and the fowls of the air came and devoured them up'. These are the bacilli scattered broadcast outside the body,

an immense majority of which die. 'Some fell upon stony places.' These are the bacilli that find lodgment in many of us, perhaps, with the production of a small focus, but nothing comes of it; they wither away 'because they have no root.' 'Some fell among thorns, and the thorns sprang up and choked them.' This represents the cases of tuberculosis, latent or active, in which the seed finds the soil suitable and grows, but the conditions are not favourable, as the thorns, representing the protecting force of the body, get the better in the struggle. 'But others fell on good ground and sprang up and bore fruit an hundredfold.'

This parallel which the author applied to the tuberculosis may be generalized for all disease conditions. The seed is the bacteria and the soil the body constitution.

XI. THE ETIOLOGICAL FACTORS OF DISEASE

Caraka classifies all etiological factors of diseases generally into two types, i. e., (निज) endogenous and (आप्तु) exogenous (Car. Sūtra. 18, 4 and 6). Suśruta pursues the subject further into its metaphysical origins and declares in his treatise in keeping with the general concept in all branches of the science that disease is the occurrence of suffering (Suś. Sūtra 24, 4). That suffering is of three kinds "आध्यात्मिकम्, आधिभौतिकम् and आधिदैविकम्, (1) Having its source in oneself; (2) Having its source in physical elements and creatures of the world; and (3) Having its source in natural and supernatural agencies. This triad of etiological categories is in accordance with the Sāṅkhya concept of the triad of the causes of all suffering. Suśruta makes further subdivision from a practical point of view of this triad so as to make seven categories of disease in the light of their etiological factors.

They are thus:-

ते पुनः सप्तविधाः—

१. आदिबलप्रवृत्ताः, २. जन्मबलप्रवृत्ताः, ३. दोषबलप्रवृत्ताः, ४. संघातबलप्रवृत्ताः, ५. कालबल-
प्रवृत्ताः, ६. दैवबलप्रवृत्ताः, ७. स्वभावबलप्रवृत्ताः

सु. सु. २४, ४

A. Endogenous Category (आध्यात्मिकाः)

1. आदिबलप्रवृत्ताः—Hereditary diseases. Inherited disease conditions

from inherent defect in genesis of one's parents. These are genetic etiological factors.

2. जन्मबलप्रवृत्ताः—Congenital disease. The disease conditions which result during the fetal period of life in the mother's womb. These are congenital etiological factors.

3. दोषबलप्रवृत्ताः—Nutritional or metabolic diseases. It also includes psychic and somatic conditions due to internal derangement of function or structures. These are the nutritional or metabolic etiological factors.

B. Exogenous Category

I. आधिभौतिकाः

4. संघातबलप्रवृत्ताः The group of diseases that are due to all kinds of trauma or injury from physical, chemical and biological sources. (Car. Sūtra 18, 4).

II. आधिदैविकाः

5. कालबलप्रवृत्ताः—Diseases resulting from abnormality of climate and season.

6. दैवबलप्रवृत्ताः—Those of supernormal origin or nature such as pandemics, epidemics, emergent conditions due to atmospheric upheaval and such other dreadful disease-conditions difficult to explain ordinarily.

7. स्वभावबलप्रवृत्ताः—Natural conditions or disabilities characterizing human life such as hunger, thirst, sleep, fatigue, decay, senescence and death.

These types of conditions may act either as exciting factors or as predisposing factors (मुबद् or प्रेरणद्), (Car. Sūtra 20, 4-5) and they may act either as immediate (सन्निकृष्ट) or as remote causes (विग्रह्य).

Those above-mentioned classifications are exhaustive and the entire varieties of etiological factors both biological and material are comprehended by them.

XII. NOSOLOGY AND THE TRIUMVIRATE

In the drama of vitiation though a number of factors or actors take part, the main plot ever remains connected with or swings round the behaviour of the triumvirate.

Once the members of the triumvirate are set into the stage of excitement by the endogenous or exogenous vitiating or toxic factors, the whole body or part of the body becomes the stage or site where the triumvirate pours out and diffuses the vitiating elements and there develops the general or special or local scenes depending upon the site and strength of the body versus the intensity of invading vitiating factors and the method and technique of war adopted by each of them as well as the effects of environmental factors.

All pathological processes and the consequent disease-conditions are represented by the signs and symptoms associated primarily with the triad of vitia. Thus in the broadest outline all disease-conditions are comprehended by this triad.

Suśruta says:—

सर्वेषां च व्याधीनां वातपित्तश्लेष्माण एव मूलं, तल्लिङ्गत्वाद्दृष्टफलत्वादागमाच्च । यथा हि कृत्स्नं विकारजातं विश्वरूपेणावस्थितं सत्त्वरजस्तमांसि न व्यतिरिच्यन्ते, एवमेव कृत्स्नं विकारजातं विश्वरूपेणावस्थितमव्यतिरिच्य वातपित्तश्लेष्माणो वर्तन्ते ।

सु. सू. २४, ८

“Vāta, Pitta and Kapha are the cause of all diseases, for the latter show their symptoms, and are found to be caused by direct observation and by the authority of tradition. Just as the entire universe of evolutes cannot transcend the triad of natural forces of Sattva, Rajas and Tamas, similarly the totality of diseases cannot transcend but fall within the triad of Vāta, Pitta and Kapha” (Suś. Sūtra 24, 8)

Caraka modifies this statement slightly differentiating endogenous diseases which are primarily due to triumvirate discordance from exogenous diseases where external trauma is primary and triumvirate discordance develops later on.

सर्व एव निजा विकारा नान्यत्र वातपित्तकफेभ्यो निर्बर्तन्ते

च. सू. १९, ५

“All endogenous diseases never occur without the discordance of Vāta, Pitta and Kapha”.

भाग्यन्तवस्त्वेव ततो विविच्यताः

च. सू. १९, ६

“Only the disorders produced by the exogenous causes are different”.

Yet in view of their special sites of localisation and affection, and the consequent variation in manifestations of forms and in view of the various etiological factors giving rise to diseases, the physician may have to give different names to specify each of such conditions.

दोषधातुमलसंसर्गादियतननिशेधविमित्तश्रेषां विकल्पः ।

सु. सू. २४, ८

The body consists of so many varieties of tissues, organs and structural and functional systems and of millions of cells each of which may be said to have its own separate life, that the pathological conditions affecting them in their individual or even combined forms would be innumerable. And so varied are the manifestations of each of these vitia and of their combined conditions that every degree of variation or proportion in their combination would require a special name, thus giving rise to an endless number of names. Expressing the impracticability of this, Caraka says, "When classified according to cause, pain, color, site, form and nomenclature, the number of these diseases becomes really countless".

Thus a simpler and more comprehensive classification is necessary for purposes of practical therapeutics. Only, the classifications should be all-comprehensive while yet allowing of the recognition of peculiar deviations from their fold.

And so some systems should be adapted for general classification which would be comprehensive of all diseases conditions and at the same time simple but significant guide in the selection of curative measures which is the ultimate aim of the science of medicine.

The classical writers like Caraka and Suśruta suggest various methods of classification of diseases for the purpose of nomenclature. Caraka, after enumerating various ways of grouping the disease conditions (Vimāna 6, 3) declares at the end of the discourse that the triumvirate-wise classification is the only possible practical method which is all-comprehensive and of significance in diagnosis and practical therapeutics.

तत्र व्याधयोऽपरिसंख्येया भवन्ति, अतिबहुत्वात् । दोषास्तु खलु परिसंख्येया भवन्ति, अतिबहुत्वात् ॥

च. वि. ६, ५

"Now the diseases are innumerable, there being an unlimited number of them. The morbidic humors, on the contrary, are strictly numerable there being a limited number of them". (Car. Vim. 6, 5)

It is therefore the right thing to classify diseases only in the light of their vital aspect as that is the pathological plank on which the science itself stands.

It is only after the basic system is formulated of classification in the light of pathological processes, that a resort should be taken to specify and designate particular disease conditions in order to enhance the detailed knowledge of diseases and facilitate the specific line of treatment. But to simply multiply the labels of disease names and describe their individual signs and symptoms without an appreciation of the basic category to which all such symptoms are common, is an unimaginative and unscientific approach to the subject.

After having a comprehensive system or framework of general disease-classification, names of particular disease condition may be added on as the knowledge of that condition is fully understood.

It is not to be inferred that no progress or evolution was made in the nosological science after establishing the triad of vital classification. That the science was kept ever progressive becomes evident when one finds that total number of disease-conditions which have been given definite names, number about 1120.

Suśruta says:

रोगाणां तु सहस्रं यच्छतं विंशतिरेव च ।

बु ड. ६६, ८

"The number of disease-conditions is 1120"

The whole list has been enumerated by the commentator Dalhana in 40 verses.

The basic categories were according to the triumvirate organization, and hence any disease condition was first grouped under that organization which was predominantly disorganized. With the advance of knowledge, the sub-grouping was made vitium-wise नानाभ्रजाः, tissue-wise रसादिधातुजाः, organ-wise अवयवजाः, or according to specific condition. But whatever be the progress made in detailed

knowledge of disease, it will not diminish the importance of triumvirate-wise classification which has fundamental importance in diagnosis, prognosis and complete success of treatment.

Triumvirate-wise Nomenclature

Each and every disease condition falls under this heading. It may be the discordance of one vitium or the discordance of two or all three; the condition of bi-discordance is termed संसर्ग (Samsarga) and the condition of tri-discordance is termed सन्निपात (Sannipāta).

Vitium-wise Nomenclature

There are certain disease conditions which affect only one vitium. They are the specific affection of that particular vitium. They are termed नागतमजाः (specific) to differentiate them from सामान्यजाः (general). This is the system-wise classification. There are 80 disease conditions due to Vāta, 40 disease conditions due to Pitta and 20 disease conditions due to Kapha. This is the organization-wise or vitium-wise classification.

Tissue-wise Nomenclature (रसादिधातुजाः)

When body-tissues where vitiation process is located play a more important and urgent part than the triumvirate, the disease is named after that particular body-tissue. This is the tissue-wise classification.

Suśruta states:

दोषदूषितेऽवस्थायं धातुषु संज्ञा—रसजोऽयं, शोणितजोऽयं, मांसजोऽयं, मेदोजोऽयं, अस्थिजोऽयं, मज्जजोऽयं, शुक्रजोऽयं व्याधिरिति ।

उ. सू. २४, ८

“Where the body-elements or tissues get vitiated and play a major part in the birth of disease, the conditions are referred to the particular tissue concerned, such as disease of the nutrient fluid, of the blood, of the flesh, of the fat, of the bone, of the marrow or of the semen”. (Suś. Sūtra. 24, 8)

Dalhāṇa while commenting on this, clarifies saying that though the disease conditions are classified and named according to the body-tissues where vitiation process is located, it is only a secondary denomination of the primary vital classification. This is how it should always be understood. He gives an interesting simile to explain this.

घृतदग्धस्त्वैकदग्धस्तान्नदग्धो कोदुग्ध इति। अत्र घृतादिष्वग्देन घृतादिस्थो वह्निर्लक्ष्यते, एवं रसादिषु व्याधिरित्यत्र रसादिस्थितवातादिदोषा लक्ष्यन्ते।

"Just as when a person is said to be scalded by heated ghee, heated oil, heated copper or iron, he is really scalded by heat through these various media, similarly when the disease is said to be due to body-tissues like blood, nutrient fluid etc., it is really due to the vitia of Vāta etc., working through these tissues".

Organ-wise Nomenclature (अवयवजः)

Similarly organ-wise classification and nomenclature is done whenever the structure and functions of that particular organ play an important part in producing the signs and symptoms of the disease viz., 94 diseases of the eye, 18 diseases of the ear, 18 diseases of the nose, 74 diseases of the mouth etc.

Symptom-wise or Sign-wise Nomenclature (लक्षणात्मकाः)

Where one particular symptom or sign was too dominant to color the whole clinical picture, the disease was named after that symptom or sign viz., ज्वर fever, अक्सर diarrhea, and व्रण wound, शोथ swelling, अग्न fractures. This is the symptom-wise or sign-wise nomenclature.

Cause-wise Nomenclature (निदानात्मकाः)

If the etiological factor was playing an exclusive part in the production of disease, the disease was designated after that etiological factor viz., कृमिरेण Helminthiasis, विषरेण Toxicosis, मदात्यय alcoholism, अश्मरी Lithiasis etc.

The local part or condition or any special factor playing a more dominant and urgent part than the triumvirate may be allowed to have its own special name applied to the disease condition to facilitate the understanding of the disease and the immediate practical line of treatment to be adopted; but this cannot be done at the cost of or by complete avoidance of triumvirate-wise consideration. Triumvirate-wise classification is the fountain-head of all sub-classifications. Triumvirate pervades every cell and intercellular space of the body

and controls every function. Nothing can happen or exist which does not fall under this heading.

The above-mentioned conditions or factors may be for the time being dominant and more urgent, but the clinical course of the disease condition has many factors to count; adaptive or the reserve power of the body, regenerative or recuperative power, resistant or digestive power of the body, all these things which are the essentials of vital phenomena will be better understood if primary triumvirate-wise classification is constantly kept in view.

The triumvirate, thus being the grammar of all pathological processes occurring in the body, becomes the primer of Nosology.

With such basic importance of triumvirate-wise classification of disease-condition, it is but natural that the intensive study of the details of this triumvirate will be carried out.

The specific conditions of diseases notwithstanding, it is helpful to arrive at the least common measure of all diseases. It is only thus that practical therapeutics can be scientific and intelligible to the expert and the average healer alike. The triumvirate of vitia offers such a basic scope for the reduction of diseases to their simplest classification.

The concept of nosology in its most comprehensive import has been laid down significantly by Caraka in the following verses:

त एवापरिसंख्येया भिद्यमाना भवन्ति हि ।

रुजःवर्णसमुत्थानस्थानसंस्थाननामभिः ॥

विकारनामाकुशलो न जिहीयात् कदाचन ।

न हि सर्वविकाराणां नामनोऽस्ति ध्रुवा स्थितिः ॥

यो ह्येतन्नित्यं ज्ञात्वा कर्माण्यारभते भिषक् ।

ज्ञानपूर्वं यथान्यथं स कर्मसु न मुच्यते ॥

च. सू. १८, ४२-४४-४५

"When classified according to cause, pain, colour, site, form and nomenclature, the number of these diseases becomes really countless.

A physician need never be ashamed if he is not able to name a disease, as there can be no definite standardization of nomenclature of all diseases.

The physician who after ascertaining all these three things, begins treatment intelligently and systematically will not err in therapeutic procedure". (Car. Sūt. 18, 42-44-47) .

XIII. CONCLUSION

Thus these medical thinkers thought of diseases and classified them from the point of view of both biological scientist as well as of the practical clinician. The particularly medical aspect of Āyurveda which in its entirety is the biological grasp of the secret workings of the life-mechanism, is based on practical utility. Its understanding and approach to disease and its treatment, is immediate and ready-made. It is calculated to avoid much waste of time and vacillation and to help the physician possessed of even the most elementary enlightenment to take note of the basic nature of the disorder by the symptoms in the light of the three basic genera of Vāta, Pitta and Kapha, and start suitable medication with the least delay. A further investigation into its general and local aspects can await delay without further aggravation of the condition, if this general line of therapeutics is already afoot. In seventy out of a hundred cases, this elementary method of tackling even is bound to produce salutary effect. It is for the intelligent physician, meanwhile to make closer scrutiny and investigation into the finer blends and overlappings of the vitia, the causative factors, the site of affection, the degree of the morbid condition and the indications and contra-indications in the measures of therapeutics and the likely complications. Caraka described the actual nature of the cryptic method of his exposition and the suggestive nature of the system propounded, thus: "Like the initial handful of grain carried by the mendicant and the seeds in the hands of the sower, these aphorisms though small in measure yield to the intelligent physician abundant result i. e., complete knowledge of the subject. It is thus a guide to the intelligent physician in the use of his powers of imagination and logic. But for the mediocre it is good to follow the method laid down. Following it in the prescribed

A physician need never be ashamed if he is not able to name a disease, as there can be no definite standardization of nomenclature of all diseases.

The physician who after ascertaining all these three things, begins treatment intelligently and systematically will not err in therapeutic procedure". (Car. Sūt. 18, 42-44-47) .

XIII. CONCLUSION

Thus these medical thinkers thought of diseases and classified them from the point of view of both biological scientist as well as of the practical clinician. The particularly medical aspect of Āyurveda which in its entirety is the biological grasp of the secret workings of the life-mechanism, is based on practical utility. Its understanding and approach to disease and its treatment, is immediate and ready-made. It is calculated to avoid much waste of time and vacillation and to help the physician possessed of even the most elementary enlightenment to take note of the basic nature of the disorder by the symptoms in the light of the three basic genera of Vāta, Pitta and Kapha, and start suitable medication with the least delay. A further investigation into its general and local aspects can await delay without further aggravation of the condition, if this general line of therapeutics is already afoot. In seventy out of a hundred cases, this elementary method of tackling even is bound to produce salutary effect. It is for the intelligent physician, meanwhile to make closer scrutiny and investigation into the finer blends and overlappings of the vitia, the causative factors, the site of affection, the degree of the morbid condition and the indications and contra-indications in the measures of therapeutics and the likely complications. Caraka described the actual nature of the cryptic method of his exposition and the suggestive nature of the system propounded, thus: "Like the initial handful of grain carried by the mendicant and the seeds in the hands of the sower, these aphorisms though small in measure yield to the intelligent physician abundant result i. e., complete knowledge of the subject. It is thus a guide to the intelligent physician in the use of his powers of imagination and logic. But for the mediocre it is good to follow the method laid down. Following it in the prescribed

go into the intricacies of detail on the subject as would interest the researcher and the learned practitioner.

The triumvirate of biological organizations determines, as we have seen, the constitution of each individual. And Caraka has dwelt elaborately on the attributes of the various types of human constitution both from the purely psychic point of view (Car. Śār. 4, 37-40) as well as from the somatic point of view (Car. Vim. 8, 95-100) in terms of *habitus* (अकृति) or the preponderant constituent vitium.

An intimate and deep knowledge of Āyurveda will enable the practical clinician of its immense value in the matter of early diagnosis i. e. long before any actual structural and deep-seated functional disorders have crept into the organism, as well as in the procedures of active immunization and prophylaxis. The daily diet and behaviour of the individual and his continual adjustment to the demands of the changing environment are to be built upon the facts of constitutional peculiarity (अकृति). The details of normal living, not to speak of the exigencies of therapeutics are to be patterned in view of the fundamental diathesis of the man. The understanding of constitution in its fullness provides the key to allergic reactions and psychic and somatic idiosyncracies. This aspect of medicine is thus all important to the clinician and Āyurveda with its various branches is like a wheel whose spokes are fixed firmly and converge to the navel of the concept of the three vitia (अदोष). Thus it is that this physiopathological perspective is all-embracing in its scope and deserves the most intense and searching scrutiny by the modern medical scholar. It is only thus and then that its soundness as a faithful representation of the body organization and mechanism of functioning, and the extent of its practical applicability and utility can be appreciated. It is a subject for profound study and judgement for the sincere and serious-minded student of medicine.

XIV. THE IDEAL OF HEALTH IN AYURVEDA

The ideal of health varies from a mere disease-free condition to that of positive and perfect health. Āyurveda set up for itself the very lofty ideal of positive health, perfect to the minutest detail.

The concept of health is in its undivided and integrated form of body-mind. The definition of man in Āyurveda is the aggregate of body, mind and spirit, and its concept of health is not only physical health but mental and spiritual health too. Its personal hygiene known as Swastha-Vṛtta (स्वास्थ्यवृत्ति) is supplemented by दृष्टान्त or the right life which inculcates the discipline of the senses and mind and the regulation of the moral life so as to accord with the happiness and good not of the individual merely but of the humanity as a whole. It is therefore social and universal in its conception and application, and comprehends a physical, mental and ethical framework of life. It is an entire concept of life that Āyurveda expounded embodying philosophy, eugenics and ethics.

Again the concept of health is individualized as no two persons are found alike in appearance or behaviour. The very word Swastha (स्वास्थ्य), meaning healthy signifies by the term स्व one's own individual constitution. Thus was the concept of individual constitution or प्रकृति brought to bear upon the subject. Ancient Greek masters and the sages of India like Caraka and Susruta have built up their systems of health and disease on this bed-rock of constitution; and this concept of constitution remains as sound as ever in its logic and practical efficacy.

Its objective moreover aimed at the fullest survival and even to overcome the handicaps of nature and age. This concept gave rise to Vitalization (रसायन) and Virilification (वर्जीकरण) systems of therapy.

This setting up of a lofty standard of health had to be implemented by an equally high standard of diagnostic methods, so detailed and perfect in all their aspects as to detect even a very minute and ordinarily unnoticeable deviation from the specific Norm of the individual. It is easy to set up norms for organizations which are simple and are on the lower rungs of the ladder of biological evolution. But the higher and subtler the organizations are the greater will be the liability to disorganization; and it is in these cases that the

diagnostic methods necessitate the highest sensitiveness in detecting deviations.

The three main organizations are of Vāta, Pitta and Kapha. These three co-exist in a single constitution. They are so diverse in nature and function that their equilibrium can be maintained only on a highly sensitive and delicate fulcrum. But this is not all. The three are not static and they have continually to adapt themselves to the ever changing environmental factors. The environmental factors appearing in a little more, less or altered form are likely to cause the disturbance of this subtle equilibrium of the triumvirate.

The edge of this sensitiveness is blunted when the concept is not that of ideal health. The trivial deviations go unnoticed and are left uncared for. But when the ideal is that of perfect psycho-somatic health, the deviation, however small and insignificant it may seem, is noted and cared for. Anything which is not to the mark is considered a positive source of trouble. Even the slightest deviation is enough to start the ringing of warning bells of impending alarm.

The criterion of ideal health in Āyurveda is प्रसन्नहृदयमनाः i. e. "the best mood in the working of the spirit, senses and mind".

The Psyche is the most sensitive galvanometer in the body; the psychic changes are more or less subjective symptoms but fortunately for the physician they are indicated reflexively on the external features of the body by way of inherent and prevailing spirit, life mood, reactive affectivity and tempo peculiar to the personality. The manifestations, are perhaps too clear to go unnoticed by the attending persons, but it requires a keen clinical sense to transcribe this script of reflex indication into a comprehensible form by observation, interpretation and correlation. Lord Chesterfield has rightly remarked that if we wish to know the real sentiments of the person we are conversing with, we should look into his face, for he can more easily command his words than his features. Life is ever moulding our expressions; our inner thoughts are written indelibly on our faces.

Even transient disturbances are not allowed to escape unnoticed by Āyurveda. It stresses upon the diagnosis of even transient disturbances and attempts to restore the lost equilibrium. It also advises the prophylactic measures to counter such adverse environmental factors in future.

This is the most glorious part of the highest concept of perfect health and the practical application of it in the maintenance thereof.

The maintenance of the norm and the prevention of deviation from the norm thus becomes the field of Āyurveda. What then is the norm or the normal condition according to Āyurveda? Definitions are always difficult to formulate and it is specially so in this case as it is a common experience that no two individuals are completely alike physically, physiologically, psychologically or in vital reactions. And hence the art of medicine necessitates the study of the individual man. Thus any definition of the Norm in Āyurveda will have to be defined from the individual point of view. Each individual is different from the other and so the norm of one will not be the norm of another.

For theoretical purposes, the norm of man in general can be described as a range of values to be accepted as a standard found to be the average in persons who appear healthy and free from disability or disease.

But for practical application the study of the individual will be necessary to achieve accuracy in diagnosis and therapeutics. Sūśruta while describing the norm of the individual states as under:-

वैलक्षण्याच्छरीराणामस्थायित्वात्तथैव च ।

दोषघातुमलानां तु परिमाणं न विद्यते ॥ सु. सू. १५, ३७

“It is not possible to lay down or standardize the exact measure of the triumvirate, body-elements or the excretory matter owing to their varying nature (in the process of adaptation to the continually changing environmental factors) as well as individual variations of the body constitution. (Sūś. Sūt. 15,37)

एषां समत्वं यच्चापि भिषग्भिरवधार्यते ।

न तत्स्वास्थ्यार्हते शक्यं वक्तुमन्येन हेतुना ॥

दोषादीनां त्वसमतामनुमानेन लक्ष्येत् ।

अप्रसङ्गेन्द्रियं वीक्ष्य पुरुषं कुक्षलो भिषक् ॥ सु. सू. १५, ३८-३९

“If a physician wants to know the state of equilibrium of all these, he can do it only by finding the signs of perfect health in that individual. The expert physician diagnoses indirectly the imbalance

condition of these body-elements by finding the person not in perfect mood". (Suś, Sūt. 15, 38-39)

समदोषः समान्निश्च समवातुमलक्रियः ।

प्रसन्नात्मेन्द्रियमताः स्वस्थ इत्यभिधीयते ॥ सु. सू. १५. ४१

"A person possessing the equilibrium of the triumvirate, balance condition of gastric fire, and harmonious working of digestion, assimilation and elimination processes and the best mood of spirit, senses and mind, is said to be in perfect health". (Suś. Sūt. 15, 41)

Thus Āyurveda has dynamic and creative view of health, for health can never be a mere static condition: it must grow like life or fall. Hence the need for constant vigilance in its promotion and for revitalizing it as a factor for intensive enjoyment of the delight of living. Life must be lived as a delight or it must yield place to disease and death. There is no no-man's land where it can remain neutral and static. In dealing with this aspect of health Āyurveda holds the palm over all other known systems of medical thought. The healthy man should be as vigilant and diligent in the maintenance and enhancement of his health as the sick one is in the riddance of disease. Such a double aspect has also been ascribed to medicament.

शेषजं द्विविधं च तत् ।

स्वस्थस्योर्जस्करं क्षित्तिं क्षिचिदातस्य रोगघ्नम् ॥ च. चि. १, ४

"Now medicine is of two kinds; one kind is promotive of vigour in the healthy, the other destructive of disease in the ailing." (Car. Cik. 1, 4)

The regimen of conduct known as (स्वस्थवृत्त) hygiene, social and individual, and a good life (सद्वृत्त) which includes the control of the senses and the mind is calculated to turn man into a noble citizen of the world, and lead him a step higher in the ladder of evolution. This is medically very efficacious in lifting man above the dangers of psychic and nervous disorders that are on the increase as a result of the heavy drain on the nervous energies of man due to the distractions, wants and make-believes, enormous and injurious ambition and frustration that modern civilized life involves. This psychic regimen provides the wholesome nutrition for the mind even as the physical regimen does to the physical body.

Caraka draws a beautiful picture of the life of a man in possession of ideal physical and psychic health who not only enjoys fully the life himself, but at the same time adds to the happiness and comfort of the whole world.

तत्र शासीरमानसाभ्यां रोगाभ्यामनभिदुतस्य विशेषेण यौवनवतः समर्थानुगतबलवीर्ययुगः-
पौरुषपराक्रमस्य ज्ञानविज्ञानेन्द्रियेन्द्रियार्थबलप्रमुदये वर्तमानस्य परमद्विरुचिरविविधोपभोगस्य समृद्धसर्वारम्भस्य
यथेष्टविचारिणः सुखमायुरुच्यते; असुखमतो विपर्ययेण;

द्वितैषिणः पुनर्भूतानां परस्वादुपरतस्य सत्यवादिनः शमपरस्य परीक्ष्यकारिणोऽप्रसन्नस्य त्रिवर्ते
परस्परेणानुनद्धतमुपसेवमानस्य पूजार्हं पूजकस्य ज्ञानविज्ञानोपशमशीलस्य वृद्धोपसेविनः सुनियतरागरोषेष्मामद-
मानवेगस्य सततं विविधप्रदानपरस्य तपोज्ञानप्रशमनित्यस्याध्यात्मविदस्तत्परस्य लोकमिमं चासुं चावेक्षमाणस्य
स्मृतिमतिमग्नो हितमायुरुच्यते; अहितमतो विपर्ययेण ॥ च. सू. ३०. २४

"Now the life of such a man is called happy as is not afflicted with either bodily or mental ailments, as is, in particular, endowed with youth, strength, virility, reputation, enterprise and boldness befitting his abilities, is actuated in his deeds by the combined urge of knowledge, science, the senses and the sense-objects, is possessed of multifarious and delightful amenities accruing from great wealth all whose efforts are prosperous and who can plan as he likes. A life that is contrary to this is deemed unhappy

The life of that man is said to be good who is a well-wisher of all creatures, who does not covet other people's goods; who is a teller of truth; who is peace-loving, who acts with deliberation, is not negligent, is devoted to the three ends (viz., virtue, wealth and enjoyment) without letting any one end come into conflict with the other two; who is reverential to those who are worthy of reverence; of a scholarly, scientific and retiring disposition; partial to the company of elders, of well curbed passions of desire, anger, envy, pride and conceit; constantly given to charitable acts; devoted always to austerity, knowledge and quietude; endowed with spiritual insight, one-minded, contemplative of the good in this world and the next, and endowed with memory and understanding. That life which is of the opposite nature is said to be 'not good'. (Car. Sūtra 30, 24)

